

4412 (3)
Rural District Council of Dartford



ANNUAL REPORT

ON CERTAIN MATTERS
CONCERNING

Public Health

FOR THE YEAR
1963



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* Based on Returns received from the Registrar General

RURAL DISTRICT COUNCIL OF DARTFORD

Report for the year 1963 on certain
matters concerning Public Health

July 1965

To THE CHAIRMAN AND MEMBERS OF THE
RURAL DISTRICT COUNCIL OF DARTFORD

Mr. Chairman, Lady and Gentlemen,

As soon as practicable after the end of each year it is the duty of a medical officer of health to make to the local authority a report for that year on the sanitary circumstances, sanitary administration, vital statistics and other public health matters concerning their district. The report that follows is written in compliance with that duty.

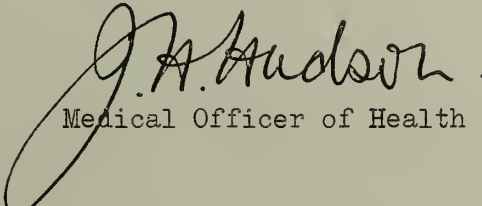
Meticulous attention to the expectation of life may be less than useful and in arranging the figures that follow one feels like a communal hypochondriac. However, it is expedient that in a population of near 60,000 one small office should record these matters in order that where feasible, local attitudes on health matters may be in harmony with local facts.

The information in this report contains much material provided by officers of other departments and other authorities or organisations. The facts on many environmental matters are the product of work by the Council's Public Health Inspectors. The presentation of the statistical material is a product of the patience of the clerical staff. I thank these colleagues for their co-operation.

On behalf of my colleagues in the public health office and myself I wish to thank the Chairman and Members of the Public Health Committee for their support and interest during the year under review.

I am, Sir, Lady and Gentlemen,

Your obedient servant,


Medical Officer of Health

1963

S U M M A R Y

The population increase continued.

The adjusted birth rate and rate of natural increase both lessened but remained above the rates for England and Wales.

The death rate fell slightly while that of England and Wales rose.

Deaths from coronary disease rose by 25% on previous years and the death rate from this disease became identical with that of England and Wales.

The trend of the death rate for cancer of the lung was less than that of England and Wales.

Deaths from tuberculosis increased.

Three "cot" deaths occurred in January and February and a fourth in December.

There was an exceptionally severe winter.

The influence of winter is reviewed in an addendum.

The suicide rate remained substantially lower than that of England and Wales and neighbouring areas.

Admissions to the Dartford group of hospitals for accidents in the home were less than previous years.

Deaths from motor vehicle accidents were less than in 1962.

22 unfit houses were demolished. 430 caravans were in use for residential purposes. The effective waiting list for Council tenancies increased by 4%.

The raw water from Fawkham pumping station showed 180+ E.coli type I per 100 ml. in three samples.

208 houses were connected to the new Hartley/Longfield sewerage scheme.

The controlled tipping of Metropolitan refuse in this district increased.

COMMENTARY ON TABLES

POPULATION

The increase continued but owing apparently to fewer in-comers the recent annual increases were less than in previous years.

The rate of natural increase (per thousand population) which has been steadily increasing in recent years also appeared to be levelling out.

	Births	Deaths	Natural increase	Population	Rate of natural increase
1954	586	416	170	39,110	4.4.
1955	627	405	222	41,290	5.4
1956	770	457	313	43,940	7.3
1957	848	486	362	45,810	8.0
1958	941	493	448	47,660	9.4
1959	979	483	496	50,090	9.9
1960	1068	455	613	52,380	11.7
1961	1159	538	621	53,260	11.6
1962	1187	560	627	55,190	11.3
1963	1203	578	625	56,320	11.0

The rate for England & Wales in 1963 was 6.0

BIRTHS

The trend has been as follows:-

	1956	1957	1958	1959	1960	1961	1962	1963
Births	770	848	941	979	1068	1159	1187	1203
*Birth Rate	16.8	18.9	19.4	19.2	19.6	20.8	20.6	18.5
Birth Rate (Eng.&Wales)	15.6	16.1	16.4	16.5	17.2	17.4	18.0	18.2

* adjusted by comp.factor

The percentage of births at home has been:-

	Births	Nursing Home or hospital	Elsewhere i.e.own home	% Home
1956	770	537	233	30
1957	848	589	259	30
1958	941	633	308	32
1959	979	654	325	33
1960	1068	706	362	34
1961	1159	768	391	34
1962	1187	766	421	35
1963	1203	766 *	437	36

* These are not typing errors, they illustrate how slow change appears in our peace time pattern of health affairs.

DEATHS

In recent years these have been:-

	1956	1957	1958	1959	1960	1961	1962	1963
Deaths (R.G)	457	486	493	483	455	538	560	578
Adjusted Death Rates (C.F)	10.5	9.6	10.0	10.3	10.1	11.1	11.5	11.2
Eng & Wales Death Rates	11.7	11.5	11.7	11.6	11.5	12.0	11.9	12.2

MAIN CAUSES OF DEATH

There has been no change in the pattern except for increased emphasis on the first quarter.

As usual the chances of dying from cancer were about 1 in 5 and from vascular lesions of the nervous system (strokes) 1 in 10. If cancer were the cause there was a 70% chance of dying before 75 whereas if V.L.N.S. were the cause there was a 70% chance of dying after reaching the age of 75. Circulatory disease continues to be responsible for one third of the deaths, half of which are under the age of 75 years.

Coronary Disease

The number increased and 16 deaths from this cause occurred under the age of 55 years.

The figures (R.G.) for the last 5 years have been:

Year	Rate per thousand population		Eng. &	
	Number Dartford R.D.	Dartford R.D.	Wales	London
1959	66	1.33	1.87	1.89
1960	101	1.92	2.01	2.02
1961	102	1.92	2.07	2.05
1962	102	1.85	2.20	2.26
1963	128	2.29	2.29	2.36

By quarters the figures (local) were:

1963.	Male	Female	Persons
1st qr.	23	23	46
2nd qr.	11	12	23
3rd qr.	16	7	23
4th qr.	<u>24</u>	<u>9</u>	<u>33</u>
	<u>74</u>	<u>51</u>	<u>125</u>

VASCULAR LESIONS OF NERVOUS SYSTEM

Much the usual picture (see 1962 report). Deaths from this cause - 1958 - 1963 have been 61, 52, 57, 65, 77 and 57.

CANCER

Much the usual picture (see 1962 report).

Cancer of the lung

Year	Rate per thousand population		Eng.&	
	Number Dartford R.D.	Dartford R.D.	Wales	London
1958	11	0.23	0.44	0.64
1959	26	0.52	0.46	0.64
1960	23	0.44	0.48	0.70
1961	17	0.32	0.49	0.67
1962	28	0.51	0.51	0.68
1963	26	0.46	0.52	0.70

4 were females, only 2 males and 1 female were under 55 years of age.

Cancer of the uterus

Much the usual picture (see 1962 report). Deaths have been:

Leukaemia

Year	Cancer of uterus	Leukaemia
1958	4	2
1959	5	4
1960	1	1
1961	5	2
1962	4	3
1963	3	4

RESPIRATORY DISEASE

Much the usual picture. More than half occur at the age of 75 or over and almost half occur in the first quarter.

DEATHS RELATING TO THE WELFARE OF INFANTS AND MOTHERS

There was one death assigned to pregnancy; delivery was at home.

The Infants deaths were:

Age	Cause	Number
Less than 1 day	- Immaturity	3
	Rhesus antibodies	1
	Congenital malformation	<u>1</u>
		5
1 to 6 days	- Immaturity	2
	Immaturity with cerebral haemorrhage	1
	Congenital malformation	<u>2</u>
		5
7 to 27 days	- Congenital malformation	1
	Pyogenic meningitis	<u>1</u>
		2
28 to 364 days	- Congenital malformation	2
	Pneumonia with congenital malformation	1
	Pneumonia	2
	Bronchitis	<u>2</u>
		7

The pneumonia and bronchitis deaths were sudden deaths. Three occurred in January and February, in satisfactory housing conditions. The fourth occurred in December in an unfit house which was subsequently closed. Ages 1 to 3 months.

The Still Births were:-

In hospital

I.C.D.

Code No.	Sex	Weeks	Weight	Cause
Y30	M	38	8 lbs	Maternal diabetes
Y32	M	36	3 lbs	Toxaemia pre-eclamptic
Y32	M	28	1 lb	" "
Y34	F	40	7 lbs	Breech delivery
Y34	M	41	9 lbs	" "
Y34	M	38	8 lbs	Malpresentation
Y34	M	40	8 lbs	Malpresentation. Bicorninate uterus
Y36	M	39	N.S.	Prolapse cord
Y37	M	34	4 lbs	Quick delivery
Y38	F	36	5 lbs	Congenital malformation
Y38	F	38	4 lbs	" "
Y38	F	40	3 lbs	" "
Y39.5	F	40	7 lbs	Ante partum asphyxia
Y39.5	M	40	7 lbs	" " "
Y39.6	M	40	5 lbs	Intra uterine death
Y39.6	F	38	5 lbs	" " "

At home

I.C.D.

Code No.	Sex	Weeks	Weight	
Y36	F	?	?	Cord round neck
Y39.5	M	?	?	Intra uterine anoxia
Y39.6	F	36	5 lbs	Intra uterine death *
Y39.6	F	?	?	Unknown
Y38	F	?	?	Congenital malformation

* At relatives home outside district

Deliveries with hazards take place in hospital and deliveries where hazards are not expected take place at home. Although comparison of still birth rates at home and hospital is thus not feasible the respective rates are of interest for a comparison with other districts.

	Dartford R.D.	Dartford Borough
Hospital Still Birth Rate	20.7	20.1
Home Still Birth Rate	11.3	10.1

DEATHS THROUGH INJURY

Deaths through motor vehicle accidents and accidents in the home are discussed below under "accidents".

One male aged 20 was drowned as a result of a collision between motor boat and steamer on the Upper Thames. Five persons died from exposure to cold. They are discussed below as cases of self neglect. (see addendum)

Suicides

At 3 the number of suicides was in keeping with the lower crude rate for this district. In the ten years 1954-63 suicides have been:

	Av.Pop.	Number	Period	Rate/100,000/year
Dartford Town	42,000	56	1954-63	13.3
Northfleet U.D.	21,000	23	1954-63	11.0
Dartford R.D.	48,000	31	1954-63	6.4
Eng. & Wales	47023,000	5715	1963	12.1

ACCIDENTS

This subject has been discussed in previous reports.

The number of admissions from accidents in the home reported in 1963 from the Dartford Group of Hospitals was only about half the usual annual number.

A death occurred at the age of 78 of a person living alone whose house caught fire.

Motor vehicle accidents caused the death of 8 residents of Dartford Rural District in 1963 - there were 9 in 1962.

The casualties on our roads not necessarily residents of this district in the last 2 years were:

1962	16 killed	134 seriously injured
1963	9 killed	135 seriously injured

INFECTIOUS
DISEASES

There was nothing much different from previous years in the picture presented by 1963.

As usual immunity against polio, smallpox, diphtheria, whooping cough and tetanus accepted by the young population through vaccinations compared well with other areas in the country, but re-vaccination of school children against smallpox was negligible.

Deaths from tuberculosis were comparatively high in 1963, recent figures being:

1958	3	1961	4
1959	2	1962	1
1960	3	1963	10

The case of food poisoning was a male aged 50 years, the agent being *T.saginata*, the infestation being probably obtained abroad. The house occupied by the patient was on main drainage.

TABLE I - SOCIAL CONDITIONS

Area (acres) 1961	34,038
Population (census 1961)	53,164
Mid-year home population 1963 (R.G.'s estimate)	56,320
Number of domestic and agricultural dwelling houses assessed to rates 31. 3. 64	16,603
Rateable value 31. 3. 64	£2,072,467
Sum represented by 1d rate 31. 3. 64	£8,404

In the last eight years the area comparability factor for births (governed by the proportion of women aged 18-44) and for deaths (governed by the proportion of all age groups) have been as follows:

Year	1956	1957	1958	1959	1960	1961	1962	1963
Births	0.96	1.02	0.98	0.98	0.96	0.96	0.96	0.88
Deaths	1.08	1.01	1.06	1.07	1.16	1.10	1.14	1.10

When local crude birth and death rates are multiplied by the appropriate area comparability factor they are comparable with the crude rate for England and Wales or with the corresponding adjusted rate for any other area.

POPULATION: Increases in the population are due to natural causes, i.e. excess of births over deaths and immigration, both being related to new houses built.

	1956	1957	1958	1959	1960	1961	1962	1963
Est.mid-year home population	43,940	45,330	47,660	50,090	52,380	53,260	55,190	56,320
Increase on previous year	2,650	1,390	2,330	2,430	2,290	880	1,930	1,130
Natural increase	323	362	448	496	613	621	627	620
Immigration	2,327	1,028	1,882	1,934	1,677	254	1,303	510
Houses built	1,018	380	742	725	561	667	406	409

Social conditions for the year may be illustrated by:

Cases dealt with by the N.S.P.C.C.

	Dec. 1962	1963
Neglect	19	24
Assault/ill treatment	2	3
Beyond control	-	1
Advice/aid sought	5	3
Children involved	87	74
Legal proceedings	2	1

Unemployed (combined figures for Rural District and Dartford Borough)

	Dec.1962	1963
Men	347	215
Women	18	60

Illegitimate birth rate per thousand live births:

	Dartford Rural District	Dartford Borough	England & Wales
1962	29	40	66
1963	30	46	69

TABLE I - (continued)

POPULATION OF YOUNG PERSONS

A guide is necessary to the population in the young age groups in the district in order that we may form an idea from vaccinations done of the proportion who have been given immunity to certain infectious diseases. A rough estimate can be made from the births which have occurred in the district in the relevant years but it assumes a stable population and does not take into account deaths after one year of age. The balance of those coming into the district and those leaving mean that these populations are probably underestimated.

Year	Age 31.12.63	Births	Infant deaths	Infants surviving to 1 year	Approx. population Dec.1963
1963	0	1203	20	1183	Age Dec.1963 0 - 4 years = 5506
1962	1	1187	19	1168	
1961	2	1159	17	1142	
1960	3	1068	23	1045	
1959	4	979	11	968	
1958	5	941	21	920	Age Dec.1963 5 - 11 years = 4718
1957	6	848	21	827	
1956	7	770	12	758	
1955	8	627	17	610	
1954	9	586	12	574	
1953	10	539	7	532	Age Dec.1963 12-15 years = 2240
1952	11	514	17	497	
1951	12	576	13	563	
1950	13	545	17	528	
1949	14	565	28	537	
1948	15	631	19	612	Age Dec.1963 16-19 years = 2502
1947	16	752	25	752	
1946	17	721	33	688	
1945	18	529	19	510	
1944	19	577	25	552	

Population of school children in primary schools 1963 = 5113

Local population estimates also useful in returns:

	Age Dec.1963	Population
Born 1957-1963	0 - 6 years	7253
" 1943-1956	7 -20 "	8208
" 1943-1963	0 -20 "	15461
" 1949-1958	5 -14 "	6346

1961 Census:

Age	Males	Females	Persons
0 - 4	2,692	2,440	5,132
5 - 9	2,120	1,935	4,055
10 -14	2,004	2,062	4,066
15 -19	1,658	1,622	3,280
20 -24	1,373	1,572	2,945
25 -34	4,229	4,313	8,542
35 -44	4,092	3,895	8,087
45 -54	3,537	3,897	7,434
55 -64	2,579	2,665	5,244
65 -74	1,357	1,824	3,181
75 +	943	917	1,860

Living alone:

	Males	Females
65 +	164	-
60 +	-	636

TABLE II - BIRTHS & DEATHS, 1963

		M	F	Persons
Live Births:	Legitimate	600	566	1166
	Illegitimate	<u>21</u>	<u>16</u>	<u>37</u>
		<u>621</u>	<u>582</u>	<u>1203</u>
Deaths from all causes:		306	272	578
Deaths from pregnancy, childbirth, abortion		-	1	1
Still Births:	Legitimate	9	10	19
	Illegitimate	<u>1</u>	<u>-</u>	<u>1</u>
		<u>10</u>	<u>10</u>	<u>20</u>
Infant deaths by age:				
0 to 6 days:	Legitimate	7	4	11
	Illegitimate	<u>-</u>	<u>-</u>	<u>-</u>
		<u>7</u>	<u>4</u>	<u>11</u>
7 to 27 days :	Legitimate	1	1	2
	Illegitimate	<u>-</u>	<u>-</u>	<u>-</u>
		<u>1</u>	<u>1</u>	<u>2</u>
28 to 364 days :	Legitimate	4	1	5
	Illegitimate	<u>-</u>	<u>2</u>	<u>2</u>
		<u>4</u>	<u>3</u>	<u>7</u>
Total under 1 year:	Legitimate	12	6	18
	Illegitimate	<u>-</u>	<u>2</u>	<u>2</u>
		<u>12</u>	<u>8</u>	<u>20</u>

Rates per 1,000 Home Population

	Dartford R.D.	England & Wales
Crude live birth rate	21.1.	18.2
Live birth rate adjusted by comparability factor	18.5	18.2
Crude death rate	10.2	12.2
Death rate adjusted by comparability factor	11.2	12.2

Rates per 1,000 Live and Still Births

Maternal death rate	0.8	0.28
Still birth rate	16.4	17.2
Perinatal death rate (s.b. & deaths 0-6 days)	25.5	29.3

Rates over 1,000 Live Births

Neonatal death rate (deaths 0-27 days)	10.8	14.3
Infant death rate (deaths 0-364 days)	16.4	21.1

TABLE IIIA- CAUSES OF DEATH ACCORDING TO SEX

Register General's Return

	M	F	Persons	
All causes	306	272	578	
Tuberculosis, respiratory	7	3	10	
Tuberculosis, other	-	-	-	
Syphilitic disease	1	-	1	
Diphtheria	-	-	-	
Whooping cough	-	-	-	
Meningococcal infections	-	-	-	
Acute poliomyelitis	-	-	-	
Measles	-	-	-	
Other infective and parasitic disease	-	-	-	
Malignant neoplasm, stomach	9	5	14)	
Malignant neoplasm, lung bronchus	22	4	26)	
Malignant neoplasm, breast	-	11	11)	
Malignant neoplasm, uterus	-	3	3)	110
Other malignant and lymphatic neoplasms	35	17	52)	
Leukaemia, aleukaemia	2	2	4)	
Diabetes	2	1	3	
Vascular lesions of nervous system	21	36	57	57
Coronary disease, angina	72	56	128)	
Hypertensions with heart disease	3	4	7)	214
Other heart disease	18	21	39)	
Other circulatory disease	16	24	40)	
Influenza	2	5	7)	
Pneumonia	23	17	40)	87
Bronchitis	18	13	31)	
Other disease of the respiratory system	5	4	9)	
Ulcer of stomach and duodenum	5	2	7	
Gastritis, enteritis and diarrhoea	1	3	4	
Nephritis and nephrosis	2	1	3	
Hyperplasia of prostate	3	-	3	
Pregnancy, childbirth, abortion	-	1	1	
Congenital malformations	5	4	9	
Other defined and ill-defined diseases	24	27	51	
Motor vehicle accidents	5	3	8	
All other accidents	3	4	7	
Suicide	2	1	3	
Homicide and operations of war	-	-	-	

TABLE IIIB - CAUSES OF DEATH ACCORDING TO AGE

Registrar General's Return

Persons	All ages	- 4 wks	1 - 4 wks	1 - 4 yrs	5 - 14 yrs	15 - 24 yrs	25 - 34 yrs	35 - 44 yrs	45 - 54 yrs	55 - 64 yrs	65 - 74 yrs	75 +	Main causes
All causes	578	13	7	5	3	9	6	9	51	93	123	259	
Tuberculosis, respiratory	10	-	-	-	-	-	1	1	3	4	1	1	
Tuberculosis, other	-	-	-	-	-	-	-	-	-	-	-	-	
Syphilitic disease	1	-	-	-	-	-	-	-	-	1	-	-	
Diphtheria	-	-	-	-	-	-	-	-	-	-	-	-	
Whooping cough	-	-	-	-	-	-	-	-	-	-	-	-	
Meningococcal infections	-	-	-	-	-	-	-	-	-	-	-	-	
Acute poliomyelitis	-	-	-	-	-	-	-	-	-	-	-	-	
Measles	-	-	-	-	-	-	-	-	-	-	-	-	
Other infective and parasitic disease													
Malignant neoplasm, stomach	14	-	-	-	-	-	-	1	-	5	3	5)	
Malignant neoplasm, lung													
bronchus	26	-	-	-	-	-	1	-	2	15	6	2)	
Malignant neoplasm, breast	11	-	-	-	-	-	-	-	4	1	2	4)	
Malignant neoplasm, uterus	3	-	-	-	-	-	-	1	1	-	-	1)	
Other malignant and lymphatic neoplasm	52	-	-	-	-	-	1	1	12	10	14	14)	110
Leukaemia, aleukaemia	4	-	-	1	-	-	-	-	-	1	-	2)	
Diabetes	3	-	-	-	-	-	-	-	-	-	1	2	
Vascular lesions of nervous system	57	-	-	-	-	-	-	-	1	8	8	40)	57
Coronary disease, angina	128	-	-	-	-	-	-	2	14	25	27	60)	
Hypertension with heart disease	7	-	-	-	-	-	-	-	1	-	5	1)	214
Other heart disease	39	-	-	1	-	-	-	-	1	1	8	28)	
Other circulatory disease	40	-	-	-	-	-	-	2	1	3	13	21)	
Influenza	7	-	-	-	1	-	-	-	-	1	-	5)	
Pneumonia	40	-	3	-	-	-	1	-	1	3	7	25)	87
Bronchitis	31	-	2	-	-	1	-	-	4	4	6	14)	
Other diseases of respiratory system	9	-	-	-	-	-	1	-	-	1	3	4)	
Ulcer of stomach and duodenum	7	-	-	-	-	-	-	-	-	3	2	2	
Gastritis, enteritis and diarrhoea	4	-	-	-	-	-	1	-	-	-	1	2	
Nephritis and nephrosis	3	-	-	-	-	-	-	-	-	1	2	-	
Hyperplasia of prostate	3	-	-	-	-	-	-	-	-	-	-	3	
Pregnancy, childbirth, abortion	1	-	-	-	-	-	1	-	-	-	-	-	
Congenital malformations	9	5	1	2	-	-	-	-	-	-	1	-	
Other defined and ill-defined diseases	51	8	1	-	1	5	-	1	2	4	9	20	
Motor vehicle accidents	8	-	-	-	1	2	-	-	2	1	2	-	
All other accidents	7	-	-	1	-	1	-	-	1	-	2	2	
Suicide	3	-	-	-	-	-	-	-	1	1	-	1	
Homicide and operations of war	-	-	-	-	-	-	-	-	-	-	-	-	

TABLE IIIC - CAUSES OF DEATH ACCORDING TO AGE

Registrar General's Return

	All ages	0-27 days	4-14 wks	1-4 yrs	5-14 yrs	15-24 yrs	25-34 yrs	35-44 yrs	45-54 yrs	55-64 yrs	65-74 yrs	75 +	Main causes
<u>Males</u>													
All causes	306	8	4	2	1	5	2	7	32	67	70	108	
Tuberculosis, respiratory	7	-	-	-	-	-	-	1	1	3	1	1	
Syphilitic disease	1	-	-	-	-	-	-	-	-	1	-	-	
Malignant neoplasm, stomach	9	-	-	-	-	-	-	1	-	4	2	2)	
Malignant neoplasm, lung bronchus	22	-	-	-	-	-	1	-	1	13	6	1)	
Other malig. and lymph. neoplasms	35	-	-	-	-	-	1	1	7	10	9	7)	68
Leukaemia, aleukaemia	2	-	-	1	-	-	-	-	-	1	-	-	
Diabetes	2	-	-	-	-	-	-	-	-	-	-	2	
Vasc. lesions of nervous system	21	-	-	-	-	-	-	-	1	6	3	11	21
Coronary disease, angina	72	-	-	-	-	-	-	2	11	18	17	24)	
Hypertension with heart disease	3	-	-	-	-	-	-	-	1	-	2	9)	109
Other heart disease	18	-	-	1	-	-	-	-	1	1	6	9)	
Other circulatory disease	16	-	-	-	-	-	-	1	1	2	6	6)	
Influenza	2	-	-	-	1	-	-	-	-	-	-	1)	48
Pneumonia	23	-	1	-	-	-	-	-	1	2	3	16)	
Bronchitis	18	-	1	-	-	-	-	-	3	3	4	7)	
Other diseases of resp. system	5	-	-	-	-	-	-	-	-	-	2	3)	
Ulcer of stomach and duodenum	5	-	-	-	-	-	-	-	-	1	2	2	
Gastritis, enteritis & diarrhoea	1	-	-	-	-	-	-	-	-	-	1	-	
Nephritis and nephrosis	2	-	-	-	-	-	-	-	-	1	1	-	
Hyperplasia of prostate	3	-	-	-	-	-	-	-	-	-	-	3	
Congenital malformations	5	3	1	-	-	-	-	-	-	-	1	-	
Other def. and ill-def. diseases.	24	5	1	-	-	3	-	1	-	-	3	11	
Motor vehicle accidents	5	-	-	-	-	1	-	-	2	1	1	-	
All other accidents	3	-	-	-	-	1	-	-	1	-	-	1	
Suicide	2	-	-	-	-	-	-	-	1	-	-	1	
<u>Females</u>													
All causes	272	5	3	3	2	4	4	2	19	26	53	151	
Tuberculosis, respiratory	3	-	-	-	-	-	-	-	2	1	-	-	
Malignant neoplasm, stomach	5	-	-	-	-	-	-	-	-	1	1	3)	
Malignant neoplasm, lung bronchus	4	-	-	-	-	-	-	-	1	2	-	1)	
Malignant neoplasm, breast	11	-	-	-	-	-	-	-	4	1	2	4)	4
Malignant neoplasm, uterus	3	-	-	-	-	-	-	1	1	-	-	1)	
Other Malig. and lymph. neoplasms	17	-	-	-	-	-	-	-	5	-	5	7)	
Leukaemia, aleukaemia	2	-	-	-	-	-	-	-	-	-	-	2)	
Diabetes	1	-	-	-	-	-	-	-	-	-	1	-	
Vasc. lesions of nervous system	36	-	-	-	-	-	-	-	-	2	5	29	3
Coronary disease, angina	56	-	-	-	-	-	-	-	3	7	10	36)	
Hypertension with heart disease	4	-	-	-	-	-	-	-	-	-	3	1)	10
Other heart disease	21	-	-	-	-	-	-	-	-	-	2	19)	
Other circulatory disease	24	-	-	-	-	-	-	1	-	1	7	15)	
Influenza	5	-	-	-	-	-	-	-	-	1	-	4)	
Pneumonia	17	-	2	-	-	-	1	-	-	1	4	9)	
Bronchitis	13	-	1	-	-	1	-	-	1	1	2	7)	
Other diseases of resp. system	4	-	-	-	-	-	1	-	-	1	1	1)	
Ulcer of stomach and duodenum	2	-	-	-	-	-	-	-	-	2	-	-	
Gastritis, enteritis & diarrhoea	3	-	-	-	-	-	1	-	-	-	-	2	
Nephritis and nephrosis	1	-	-	-	-	-	-	-	-	-	1	-	
Pregnancy, childbirth, abortion	1	-	-	-	-	-	1	-	-	-	-	-	
Congenital malformations	4	2	-	2	-	-	-	-	-	-	-	-	
Other def. and ill-def. diseases	27	3	-	-	1	2	-	-	2	4	6	9	
Motor vehicle accidents	3	-	-	-	1	1	-	-	-	-	1	-	
All other accidents	4	-	-	1	-	-	-	-	-	-	2	1	
Suicide	1	-	-	-	-	-	-	-	-	1	-	-	

TABLE IV - CAUSES OF DEATH ACCORDING TO AGE

Compiled locally

	All ages	Under 4 weeks	4 wks-1 yr	1 -	2 - 4	5 - 14	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75+
All causes	573	13	7	1	3	3	9	6	9	51	91	124	257
Tuberculosis, respiratory	8	-	-	-	-	-	-	-	1	2	4	-	1
Tuberculosis, other	-	-	-	-	-	-	-	-	-	-	-	-	-
Syphilitic disease	1	-	-	-	-	-	-	-	-	-	1	-	-
Diphtheria	-	-	-	-	-	-	-	-	-	-	-	-	-
Whooping cough	-	-	-	-	-	-	-	-	-	-	-	-	-
Meningococcal infections	-	-	-	-	-	-	-	-	-	-	-	-	-
Acute poliomyelitis	-	-	-	-	-	-	-	-	-	-	-	-	-
Measles	-	-	-	-	-	-	-	-	-	-	-	-	-
Other infective and parasitic diseases	-	-	-	-	-	-	-	-	-	-	-	-	-
Malignant neoplasm, stomach	15	-	-	-	-	-	-	-	-	-	5	3	7
Malignant neoplasm, lung bronchus	25	-	-	-	-	-	-	1	-	2	14	6	2
Malignant neoplasm, breast	12	-	-	-	-	-	-	-	-	4	1	2	5
Malignant neoplasm, uterus	3	-	-	-	-	-	-	-	1	1	-	-	1
Other malignant and lymphatic neoplasms	48	-	-	-	-	-	-	-	1	12	10	13	12
Leukaemia and aleukaemia	4	-	-	-	1	-	-	-	-	-	1	-	2
Diabetes	4	-	-	-	-	-	-	-	-	-	1	1	2
Vascular lesions of nervous system	57	-	-	-	-	-	-	-	-	1	8	8	40
Coronary disease, angina	125	-	-	-	-	-	-	-	2	14	22	29	58
Hypertension with heart disease	6	-	-	-	-	-	-	-	-	1	-	4	1
Other heart disease	40	-	-	1	-	-	-	-	1	1	2	7	28
Other circulatory disease	39	-	-	-	-	-	-	-	1	1	4	14	19
Influenza	8	-	-	-	-	1	-	-	-	-	1	-	6
Pneumonia	38	-	3	-	1	-	1	-	-	2	2	7	22
Bronchitis	28	-	2	-	-	-	1	-	-	2	4	7	12
Other diseases of the respiratory system	9	-	-	-	-	-	-	1	-	1	1	-	6
Ulcer of stomach and duodenum	6	-	-	-	-	-	-	-	-	-	2	2	2
Gastritis, enteritis and diarrhoea	4	-	-	-	-	-	-	1	-	-	-	1	2
Nephritis and nephrosis	3	-	-	-	-	-	-	-	-	-	1	2	-
Hyperplasia of prostate	3	-	-	-	-	-	-	-	-	-	-	-	3
Pregnancy, childbirth and abortion	1	-	-	-	-	-	-	1	-	-	-	-	-
Congenital malformations	8	6	1	-	-	-	-	-	-	-	-	1	-
Other defined and ill-defined diseases	60	7	1	-	-	1	5	1	2	2	5	13	23
Motor vehicle accidents	8	-	-	-	-	1	2	-	-	2	1	2	-
All other accidents	7	-	-	-	1	-	1	-	-	1	-	2	2
Suicide	3	-	-	-	-	-	-	-	-	1	1	-	1
Homicide and operations of war	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE V - CAUSES OF DEATH

Ages 75 and over
(compiled locally)

	MALE						FEMALE				
	Total males & females	Total	75-79	80-84	85-89	90-94	Total	75-79	80-84	85-89	90-94
All causes	258	108	40	38	20	10	150	55	37	38	18
Tuberculosis, respiratory	1	1	-	-	1	-	-	-	-	-	-
Tuberculosis, other	-	-	-	-	-	-	-	-	-	-	-
Syphilitic disease	-	-	-	-	-	-	-	-	-	-	-
Diphtheria	-	-	-	-	-	-	-	-	-	-	-
Whooping cough	-	-	-	-	-	-	-	-	-	-	-
Meningococcal infections	-	-	-	-	-	-	-	-	-	-	-
Acute poliomyelitis	-	-	-	-	-	-	-	-	-	-	-
Measles	-	-	-	-	-	-	-	-	-	-	-
Other infective and parasitic diseases	-	-	-	-	-	-	-	-	-	-	-
Malignant neoplasm, stomach	7	2	1	1	-	-	5	2	1	2	-
Malignant neoplasm, lung bronchus	2	1	1	-	-	-	1	1	-	-	-
Malignant neoplasm, breast	5	-	-	-	-	-	5	3	1	-	1
Malignant neoplasm, uterus	1	-	-	-	-	-	1	1	-	-	-
Other malignant and lymphatic neoplasms	12	7	2	3	2	-	5	2	1	1	1
Leukaemia, aleukaemia	2	-	-	-	-	-	2	1	1	-	-
Diabetes	2	2	1	1	-	-	-	-	-	-	-
Vascular lesions of nervous system	40	11	6	3	1	1	29	10	7	11	1
Coronary disease, angina	58	24	11	9	3	1	34	16	6	8	3
Hypertension with heart disease	1	-	-	-	-	-	1	-	-	1	-
Other heart disease	28	7	2	3	1	1	21	6	6	5	4
Other circulatory disease	19	7	3	2	-	2	12	3	3	3	2
Influenza	6	1	-	-	1	-	5	1	1	1	2
Pneumonia	22	14	3	5	4	2	8	3	1	3	1
Bronchitis	12	6	3	2	-	1	6	1	4	1	-
Other diseases of the respiratory system	6	5	1	3	1	-	1	-	1	-	-
Ulcer of stomach & duodenum	2	2	-	2	-	-	-	-	-	-	-
Gastritis, enteritis and diarrhoea	2	-	-	-	-	-	2	2	-	-	-
Nephritis and nephrosis	-	-	-	-	-	-	-	-	-	-	-
Hyperplasia of prostate	3	3	2	-	-	1	-	-	-	-	-
Congenital malformations	-	-	-	-	-	-	-	-	-	-	-
Other defined and ill-defined diseases	24	13	4	3	5	1	11	2	4	2	3
Motor vehicle accidents	-	-	-	-	-	-	-	-	-	-	-
All other accidents	2	1	-	1	-	-	1	1	-	-	-
Suicide	1	1	-	-	1	-	-	-	-	-	-

TABLE VI - DEATHS BY QUARTER AND PLACE

		1st qr.	2nd qr.	3rd qr.	4th qr.	Year
Deaths assigned to R.D.		194	121	122	136	573
Mental hospital deaths		<u>25</u>	<u>13</u>	<u>15</u>	<u>10</u>	<u>63</u>
Non-institutional deaths		169	108	107	126	510
Number of deaths						
Dartford R.D.	1960	127	124	89	116	456
	1961	164	107	128	134	533
	1962	170	122	112	154	558
	1963	194	121	122	136	573
Death rates	1960	11.3	11.0	7.9	10.3	10.1
Dartford R.D.	1961	13.6	8.8	10.5	11.1	11.0
adjusted by C.F.	1962	14.1	10.1	9.3	12.7	11.5
	1963	15.1	9.4	9.5	10.6	11.2
England & Wales	1960	13.1	10.9	9.8	12.2	11.5
	1961	15.6	10.9	9.5	11.9	12.0
	1962	15.5	11.1	9.4	11.9	11.9
	1963	17.0	11.0	9.6	11.2	12.2

NON-INSTITUTIONAL DEATHS BY PLACE OF OCCURRENCE

All ages	M	F	M	F	M	F	M	F	P
Home	29	39	23	17	20	11	20	32	191
Hospital	55	43	39	27	44	28	41	29	306
Elsewhere	2	1	2	-	3	1	1	3	13
	86	83	64	44	67	40	62	64	510
Aged 75+									
Home	10	24	7	7	6	6	7	18	85
Hospital	32	23	11	17	15	14	13	19	144
Elsewhere	-	-	-	-	-	-	-	1	1
	42	47	18	24	21	20	20	38	230

NON-INSTITUTIONAL DEATHS AS PERCENTAGE OF ALL DEATHS

All ages									
Home	34	46	35	39	30	27	32	50	36
Hospital	64	52	61	61	65	70	65	46	61
Elsewhere	2	2	4	-	5	3	3	4	3
	100	100	100	100	100	100	100	100	100
Aged 75+									
Home	23	50	39	29	29	30	36	48	36
Hospital	77	49	61	71	71	70	64	50	61
Elsewhere	-	1	-	-	-	-	-	2	3
	100	100	100	100	100	100	100	100	100

Deaths in Hospital

	Dartford Town	Dartford R.D.	Northfleet U.D.
1962 all ages	73%	57%	49%
aged 75+	75%	50%	47%
1963 all ages	72%	61%	48%
aged 75+	72%	61%	43%

Deaths at ages of 65 and over as percentage of deaths at all ages.

	65 to 74		75 years and over	
	Dartford R.D.	England & Wales	Dartford R.D.	England & Wales
1961	139	26%	247	46%
1962	120	22%	258	46%
1963	123	23%	258	44%

TABLE VII - MAIN CAUSES OF DEATH - 1963

By month and quarter (compiled locally)

All ages	All causes	Main causes	Other causes	Circ: disease	Cancer	Vasc.les. N.S.	Resp: disease
January	62	50	12	27	7	8	8
February	48	35	13	15	4	4	12
March	84	76	9	31	13	10	21
1st qr.	194	161	34	73	24	22	41
April	45	31	14	17	5	4	5
May	41	33	8	12	11	3	7
June	35	26	9	17	7	1	1
2nd qr.	121	90	31	46	23	8	13
July	48	41	7	21	14	3	3
August	40	28	12	8	13	5	2
September	34	29	5	14	7	5	3
3rd qr.	122	98	24	43	34	13	8
October	37	28	9	13	7	5	3
November	37	30	7	16	5	4	5
December	62	51	11	19	14	5	13
4th qr.	<u>136</u>	<u>109</u>	<u>27</u>	<u>48</u>	<u>26</u>	<u>14</u>	<u>21</u>
Year	573	458	116	210	107	57	83

0-74

January	33	23	10	13	4	3	3
February	18	12	6	6	3	1	2
March	42	37	6	13	9	4	10
1st qr.	93	72	22	32	16	8	15
April	23	14	9	7	4	1	2
May	25	22	3	6	9	3	4
June	24	17	7	11	5	-	1
2nd qr.	72	53	19	24	18	4	7
July	34	28	6	13	12	1	2
August	26	16	10	3	10	1	2
September	16	13	3	7	5	-	1
3rd qr.	76	57	19	23	27	2	5
October	20	14	6	7	6	-	1
November	19	14	5	8	2	1	3
December	35	27	8	10	9	2	6
4th qr.	<u>74</u>	<u>55</u>	<u>19</u>	<u>25</u>	<u>17</u>	<u>3</u>	<u>10</u>
Year	315	237	79	104	78	17	37

75+

January	29	27	2	14	3	5	5
February	30	23	7	9	1	3	10
March	42	39	3	18	4	6	11
1st.qr.	101	89	12	41	8	14	26
April	22	17	5	10	1	3	3
May	16	11	5	6	2	-	3
June	11	9	2	6	2	1	-
2nd qr.	49	37	12	22	5	4	6
July	14	13	1	8	2	2	1
August	14	12	2	5	3	4	-
September	18	16	2	7	2	5	2
3rd qr.	46	41	5	20	7	11	3
October	17	14	3	6	1	5	2
November	18	16	2	8	3	3	2
December	27	24	3	9	5	3	7
4th qr.	<u>62</u>	<u>54</u>	<u>8</u>	<u>23</u>	<u>9</u>	<u>11</u>	<u>11</u>
Year	258	221	37	106	29	40	46

TABLE VII - MAIN CAUSES OF DEATH (continued)

				Main causes			
All ages				(440-468)	(140-205)	(330-334)	(470-527)
All	Main	Other		Circulatory	Cancer	Vasc.les.	Resp.
causes	causes	causes		diseases		C.N.S.	diseases
<u>As percentage of all causes</u>							
Dartford Rural District (Registrar General's figures)							
1962	560	464	96	189	107	77	91
%	100%	83%	17%	34%	19%	14%	16%
1963	578	468	111	214	110	57	86
%	100%	81%	19%	37%	19%	10%	15%
England & Wales (Registrar General's figures)							
1962	557,636	461,679	95,957	208,217	101,608	78,297	73,557
%	100%	83%	17%	38%	18%	14%	13%
1963	572,868	477,021	95,847	213,522	102,416	80,340	80,743
%	100%	83%	17%	37%	18%	14%	14%
Dartford Rural District (local figures)							
All ages							
1st qr.	100%	83%	17%	37%	13%	11%	22%
2nd qr.	100%	74%	26%	37%	17%	7%	11%
3rd qr.	100%	80%	20%	35%	28%	10%	7%
4th qr.	100%	80%	20%	35%	19%	10%	16%
Year	100%	80%	20%	36%	19%	10%	15%
Aged 0-74 years							
1st qr.	100%	77%	23%	34%	17%	9%	17%
2nd qr.	100%	74%	26%	33%	25%	6%	10%
3rd qr.	100%	75%	25%	30%	36%	3%	7%
4th qr.	100%	74%	26%	34%	23%	4%	14%
Year	100%	75%	25%	33%	25%	5%	12%
Aged 75+							
1st qr.	100%	88%	12%	41%	8%	14%	26%
2nd qr.	100%	76%	24%	45%	10%	8%	12%
3rd qr.	100%	89%	11%	44%	15%	24%	6%
4th qr.	100%	87%	13%	37%	14%	18%	18%
Year	100%	86%	14%	41%	11%	16%	18%
<u>Distribution of deaths from each main cause between two age groups as % of all ages</u>							
Dartford Rural District							
Aged 0-74 years							
1st qr.	48%	45%	64%	44%	67%	36%	38%
2nd qr.	59%	59%	61%	52%	78%	50%	54%
3rd qr.	62%	58%	79%	54%	80%	15%	62%
4th qr.	55%	50%	70%	52%	65%	21%	48%
Year	55%	52%	68%	50%	73%	30%	45%
Aged 75+							
1st qr.	52%	55%	36%	56%	33%	64%	62%
2nd qr.	41%	41%	39%	48%	22%	50%	46%
3rd qr.	38%	42%	21%	46%	20%	85%	38%
4th qr.	45%	50%	30%	48%	35%	79%	52%
Year	45%	48%	32%	50%	27%	70%	55%

TABLE VII - MAIN CAUSES OF DEATH (continued)

Deaths from Respiratory Disease

Deaths during whole years.

	Aged 0 - 74 years			Aged 75 and over		
	Respiratory disease	All causes	% Respiratory	Respiratory disease	All causes	% Respiratory
1958	36	282	13%	40	211	19%
1959	32	273	12%	36	210	17%
1960	26	267	10%	26	189	14%
1961	25	286	9%	47	247	19%
1962	40	301	13%	50	257	19%
1963	39	314	12%	46	258	18%

Deaths during first quarters.

1958	13	102	13%	20	72	28%
1959	12	80	15%	16	77	21%
1960	12	71	17%	8	56	14%
1961	11	72	15%	26	92	28%
1962	21	86	24%	23	86	27%
1963	17	92	17%	26	101	26%

1958 Virus A2 influenza first quarter
 1959 Virus A2 and B influenza first quarter
 1960 No influenza the whole year
 1961 Virus A2 influenza first quarter
 1962 Virus B influenza first quarter. Fog 3rd to 7th December.
 1963 Virus A2 influenza. +exceptionally cold winter first quarter.

TABLE VIII - PREVALENCE OF INFECTIOUS DISEASES

Notifiable Diseases (other than tuberculosis)

Disease										
General Population	Total	0-1	1-3	3-5	5-10	10-15	15-25	25-45	45-65+	Age?
Typhoid fever	-	-	-	-	-	-	-	-	-	-
Measles	1064	32	204	314	477	8	5	2	-	22
Whooping cough	43	5	7	5	23	1	1	1	-	-
Scarlet fever	17	1	3	2	11	-	-	-	-	-
Pneumonia	3	-	-	-	-	-	-	2	1	-
Dysentery	21	-	2	3	7	-	-	7	2	-
Food poisoning	1	-	-	-	-	-	-	-	1	-
Paratyphoid fever	-	-	-	-	-	-	-	-	-	-
	1149	38	216	324	518	9	6	12	4	22

Residential Institutions of more than 100 population

There was none.

Measles (according to date of notification)

	November	December	January	February	March	April	Total
1954-1955	1	1	5	4	43	76	130
1955-1956	-	1	-	2	-	4	7
1956-1957	-	-	16	26	153	119	314
1957-1958	-	-	1	-	-	3	4
1958-1959	15	70	113	106	58	32	394
1959-1960	-	2	-	-	-	-	2
1960-1961	11	15	312	528	306	117	1289
1961-1962	2	-	-	-	-	-	2
1962-1963	44	34	65	30	162	232	567
1963-1964	-	-	-	1	1	6	8

	Ash	Darenth	Eynsford	Farningham	Fawkham	Hartley	Horton Kirby	West Kingsdown	Longfield	Southfleet	Stone	Sutton-at-Hone	Swanley	Wilmington	TOTAL
January	2	7	1	2	1	1	2	2	10	25	6	-	4	5	68
February	-	-	2	-	1	-	-	1	-	-	2	5	-	20	31
March	-	5	16	6	3	1	2	-	-	1	21	6	4	58	123
April	-	5	28	5	-	-	13	3	-	1	80	14	37	68	254
May	1	11	3	-	-	-	11	2	-	-	34	4	41	30	137
June	-	5	1	-	2	-	4	86	-	1	26	15	100	44	284
July	-	2	24	3	1	-	1	11	-	-	8	4	59	16	129
August	-	3	-	12	-	-	-	1	-	-	-	-	17	2	35
September	-	-	-	-	-	-	-	2	-	-	-	-	-	-	2
October	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
November	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total for year	3	38	75	28	8	2	33	108	10	28	177	48	262	244	1064

Non-notifiable diseases

The following non-notifiable diseases were reported from the Schools:

German measles	5
Chicken pox	56
Pink eye	1
Mumps	21

TABLE IX - TUBERCULOSIS

(a) RESPIRATORY

NOTIFICATIONS

Year	Year	Year
1955 36	1958 25	1961 23
1956 29	1959 27	1962 20
1957 33	1960 25	1963 14

NOTIFICATIONS BY AGE

	Total	0-14	15-19	20-24	25-34	35-44	45-54	55-64	65+
Males	9	-	-	1	1	1	2	3	1
Females	5	-	-	-	1	1	2	1	-
	14	-	-	1	2	2	4	4	1

Of the 9 males, 5 were infectious, they were aged 38, 49, 53, 61 and 79 years. 3 were non-infectious. The diagnosis of one was changed to Carcinoma of the bronchus.

Of the 5 females, one was infectious, a housewife aged 42 years and 4 were were known not to be infectious.

2 males and one female of the above cases were really transferredⁱⁿ from another district - all non-infectious.

NUMBER OF CASES OF RESPIRATORY TUBERCULOSIS ON THE REGISTER

	Male	Female	Persons
Numner on register at 31.12.59	253	187	440
-ditto- 31.12.60	254	193	447
-ditto- 31.12.61	270	195	465
-ditto- 31.12.62	271	207	478
-ditto- 31.12.63	272	210	482

CHANGES IN REGISTER

Additions 1963		Removals 1963	
New notifications	14	Left district	12
Came into district	35	Diagnosis not confirmed	1
Restored to register	<u>3</u>	Lost sight of	3
	52	Died	12
	—	Recovered	<u>20</u>
			48

(b) NON-RESPIRATORY

NOTIFICATIONS IN RECENT YEARS

1955	7	1958	4	1961	3
1956	1	1959	10	1962	2
1957	3	1960	5	1963	1

The one notification in 1963 was a male aged 32 with tuberculous glands of neck.

NUMBER OF CASES OF NON-PULMONARY TUBERCULOSIS ON REGISTER AT DECEMBER 31st.

	Male	Female	Persons		Male	Female	Persons
1955	28	30	58	1959	22	19	41
1956	29	30	59	1960	23	23	46
1957	28	27	55	1961	23	24	47
1958	23	16	39	1962	22	23	45
				1963	19	21	40

CHANGES IN REGISTER IN 1963

Additions		Removals	
New notifications	1	Left district	2
Came into district	<u>1</u>	Recovered	<u>5</u>
	2		7
	—		—

TABLE IX - TUBERCULOSIS
(c) RESPIRATORY (continued)

MASS X-RAY SERVICE, 1963

MASS X-RAY SERVICE, 1963					Routine						
	Over 45 service				Mass X-ray Service				Total		Persons
	Industry		Public		Industry*		Public		M	F	
	M	F	M	F	M	F	M	F			
No.X-rayed	699	20	297	108	357	277	-	-	1353	405	1758
Active											
Tuberculosis	1	-	1	-	-	-	-	-	2	-	2
Incidence %	1‰	-	3‰	-	-	-	-	-	1.5‰	-	1.2‰

NOT PREVIOUSLY X-RAYED (included in above)

No.X-rayed	146	6	97	61	85	128	-	-	328	195	523
Active											
Tuberculosis	-	-	1	-	-	-	-	-	1	-	1
Incidence %	-	-	10‰	-	-	-	-	-	3.1‰	-	1.9‰

* includes 239 males and 256 females at Colleges,hospitals, etc.

NON-TUBERCULOSIS CASES FOUND

	Male	Female	Persons
Carcinoma of bronchus	1	-	1
Sarcoidosis	1	-	1
Pneumonitis	1	2	3
Bronchiectasis	-	1	1
Asbestosis	1	-	1
Diaphragmatic Hernia	-	1	1
Hiatus Hernia	-	2	2
Still under investigation	1	1	2
Cardio vascular lesions	5	4	9
Abnormalities requiring no action	38	7	45
Failed to attend for investigation	-	2	2

ARTFORD CHEST CLINIC. This R.D. has a quarter of the population served.

	1959	1960	1961	1962	1963
Total persons attending for first time	1,688	1,693	1,516	1,715	1,528
(a) Referred by doctors	1,016	1,134	1,081	1,217	1,056
(b) Contacts	587	506	356	448	425
(c) From other sources,e.g.transfers	85	53	79	50	47
New cases					
(a) Active pulmonary tuberculosis	95	79	50	57	50
(b) Non-pulmonary tuberculosis	22	13	14	10	10
(c) Bronchial neoplasm	Not recorded		23	39	34
Found to be sputum positive					
(a) New cases	42	39	21	25	27
(b) Old cases	31	14	9	24	16
Total attendances	7,695	7,797	7,197	7,328	6,948
(a) Total persons attending	3,595	3,536	3,342	3,576	3,469
(b) Average attendances per person	2.2	2.2	2.15	2.05	2.00

In addition some 500 other conditions were found each year.

TABLE IX TUBERCULOSIS
(d) RESPIRATORY (continued)

DEATHS OF PERSONS SUFFERING FROM TUBERCULOSIS

Persons removed from the tuberculosis register in 1963 following death.

Year born (males)	Year notified	Cause of death		Year died	Infectious when diagnosed
		Underlying	Contributory		
1876	1958	1a. Chr. bronchitis b. Chr. pul. tuberculosis	-	1963	Yes
1884	1944	1a. Bronchopneumonia	-	1963	No
1894	1953	c. Perforated diverticulitis of colon	-	1963	Yes
1896	1952	1a. Haemoptysis b. Chr. pul. tuberculosis c. Carcinoma of bronchus	-	1963	Yes
1905	1955	1a. Cor pulmonale b. Chr. bronchitis and emphysema	-	1962	No
1914	1963	1a. Coronary thrombosis	Pul. tuberculosis	1963	Yes
1902	1943	1a. Cor pulmonale b. Chr. pul. fibrosis and emphysema c. Chr. pul. tuberculosis	Mental sub- normality	1963	Yes
1929	1963	1a. Carcinoma of bronchus	-	1963	No
1900	1949	1a. Resp. failure b. Chr. bilateral (massive) tuberculosis lungs	Severe sub- normality	1963	?
1924	1963	1a. Tuberculous meningitis b. Pul. tuberculosis	-	1963	Yes
(females)					
1908	1957	1a. Bronchopneumonia b. Chr. pul. tuberculosis	Severe sub- normality	1963	?
1918	1954	1a. Spontaneous pneumothorax b. Pul. tuberculosis	Mongolism	1963	?

Deaths from tuberculosis of persons not on tuberculosis register.

1903 (male)	not notified	1a. Pul. tuberculosis	Bronchitis and bronchiectasis	1963	tuber- culosis doubtful (pos.) (sputum) (terminal)
1912 (female)	not notified	1a. Miliary tuberculosis b. Pul. tuberculosis	-	1963	Diagnosed p.m.

TABLE X - VACCINATIONS

Virus Diseases

(a) POLIOMYELITIS

Vaccination doses received in the five years ending Dec.31st.1963

Second doses

Born	1959 Injected	1960 Injected	1961 Injected	1962 Injected Oral		1963 Injected Oral		1959-63 Total
1957-1963	977	787	1029	170	739	3	1025	4730
1943-1956	1314	115	214	71	35	-	13	1762
1933-1942		224	341	63	79	-	37	6159
1921-1932	2299	1389	1329	144	181	-		
Others			29			-	44	
	4590	2515	2942	448	1034	3	1119	12651

Third doses

Born	1959 Injected	1960 Injected	1961 Injected	1962 Oral & Oral Injected		1963 Oral & Oral Injected		1959-63 Total
1957-1963	869	902	915	873	739	109	1025	5432
1943-1956	5832	895	538	213	35	10	13	7536
1933-1942		1458	370	272	79	15	37	6492
1921-1932	903	827	1258	992	181	17	44	
Others			39					
	7604	4082	3120	2350	1034	151	1119	19460

Percentage of young population vaccinated 1959-63

Born	Estimated population	No.had 2nd dose	% of population	Total * 3rd dose	% of population
1957-63	7253	4730	65%	5432	75%
1943-56	8208	1762	21%	7536	92%
1943-63	15461	6492	42%	12968	84%

* Vaccination began in 1956, some of those receiving 3rd doses received their second doses in 1956, 1957 or 1958. 2nd doses of incoming population not recorded here when given before arrival. Thus more with 3rd doses than with 2nd doses within five years 1958-63.

Fourth doses

Born	Estimated population	4th dose 1961	4th dose 1962	4th dose 1963	Total	Percentage
1952-58	4718	3257	597	569	4423	94%

COMPARISON WITH OTHER AREAS: Vaccinations in five years 1959-63 of those born 1943-63 expressed as a percentage of estimated population.

Dartford R.D. Dartford Borough Northfleet U.D. Kent A.C.*

2nd dose	42%	36%	34%	?
3rd dose	84%	74%	72%	81%

* Vaccinations since 1956 for Kent A.C.

TABLE X - VACCINATIONS (continued)
(b) SMALLPOX

NUMBERS VACCINATED AND REVACCINATED by age at date of vaccination.

Year	Vaccinated					Total
	UNDER 1 year	1 year	2 - 4	5 - 15	15 or over	
1963	?	217	?	?	?	?
1962	876	106	187	574	776	2519
1961	702	50	27	20	21	820
1959	646	44		12	13	735
1958	447	29		4	12	492

Revaccinated						
1963	?	?	?	2*	?	?
1962	-	10	98	886	1838	2832
1961	-	-	2	4	3	9
1951	-	-	-	4	7	11
1958	-	-	2	14	13	29

* Age 5-7 years

For the year 1960 figures on these lines were not available.

INFANT VACCINATION RATE

Up to the end of 1961 most infants who were vaccinated were vaccinated in the first year of life but in 1962 more infants than in former years were vaccinated at a later age. In 1963 the second year of life was advocated as an age for vaccination. The percentage of the number of births in a given year of those vaccinated while under one year of age in that year is used here as a vaccination rate up to 1962.

	Number of live births	Number vaccinated under 1 year	Percentage of births of those vaccinated
1963	1203	records no longer kept	?
1962	1187	876	74%
1961	1159	702	61%

SECOND YEAR VACCINATION RATE

With practice changing to vaccination in the second year of life the County no longer record vaccinations at ages under 1 year. The appropriate rate in future will be the vaccinations done as a percentage of infants surviving to the age of one year.

	Infants aged 1 year in January	Vaccinations done at ages 12 - 23 months	Percentage
1963	1168	217	19%
1962	1142	106	9%
1961	1045	50	5%

SCHOOL CHILD IMMUNITY DECEMBER 1963

Estimated population aged 5-14 Born 1949-58	Vaccinated or Revaccin- ated before 1962 in school years	Vaccin- ated 1962	Revaccin- ated 1962	Vaccin- ated 1963	Revaccin- ated 1963	Vaccin- ated or revaccin- ated in school years by Dec. 1963	% aged 5-14 with immun- ity Dec. 1963
6346	say 120*	517	797	say 10	2**	1446	23%

* roughly 15 a year

† i.e. 1/10 left school by 1963

** age 5 - 7 years

TABLE X - VACCINATIONS (continued)

(b) SMALLPOX (continued)

SCHOOL CHILD REVACCINATIONS DECEMBER 1963 (approximately)

Av. Infant vaccin- ation rate 1949-58	No. eligible for revaccin- ation 6346 x 0.55	Revaccin- ated before 1962 in school yrs (about 10 per year)	Revaccin- ated 1962 886 x 0.9	Revaccin- ated 1963	Total Revaccin- ated Before Dec. 1963 in school years	% of those eligible with immunity from revaccin- ation
55%	3500	80	797	2	879	25%

COMPARISONS WITH OTHER AREAS

1962	Dartford Rural Dis.	Dartford Borough	Kent A. C	England & Wales	Northfleet U.D.
1962					
Percentage of 1962 births of those vaccinated under 1 year	74%	72%	63%	49%	59%
1963					
Percentage of those aged 1 year vaccinated	19%	18%	17%	10%	23%

Bacterial Diseases

(c) DIPHTHERIA

NUMBER VACCINATED

	Age at 31st December	Primary inoculations done in the year	Reinforcing inoculations done in the year
1963	0 - 4 years	1047	834
	5 -14 years	3	460
1962	0 - 4 years	976	509
	5 -14 years	31	369
1961	0 - 4 years	1125	428
	5 -14 years	159	763
1960	0 - 4 years	1022	132
	5 -14 years	43	328

The above include courses completed for diphtheria alone and diphtheria/
tetanus or diphtheria/whooping cough/tetanus combined.

PRIMARY VACCINATIONS 0 - 4 years December 1963

Born	Vaccinated by December						Estimated population Dec. 1963
	1959	1960	1961	1962	1963	1959-63	
1963	-	-	-	-	514	514	1183
1962	-	-	-	430	513	943	1168
1961	-	-	453	516	13	982	1142
1960	-	412	506	18	5	941	1045
1959	190	525	74	8	2	799	968
Total vaccin- ed	190	937	1033	972	1047	4179	5506

TABLE X - VACCINATIONS (continued)

(c) DIPHTHERIA (continued)

PERCENTAGE OF 0 - 4 POPULATION VACCINATED

Born	1959	1960	1961	1962	1963	Total vaccinated 1959-1963
1963	-	-	-	-	43%	43%
1962	-	-	-	37%	44%	81%
1961	-	-	40%	45%	1%	86%
1960	-	39%	49%	2%	0%	90%
1959	20%	54%	8%	1%	0%	83%
% of those vaccinated by Dec.1963	5%	22%	25%	23%	25%	100%
% of 0 - 4 population of 1963 vaccinated	3%	17%	19%	18%	19%	76%

COMPARISON WITH OTHER AREAS

	Dartford Rural Dis.	Dartford Borough	Northfleet U.D.	Kent A. C.
Percentage of estimated population born 1962 vaccinated in 1962 or 1963	81%	84%	82%	80%

(d) WHOOPING COUGH

PRIMARY VACCINATIONS

Year	Age at 31st December 0 - 4 years	Age at 31st December 5 - 14 years
1963	1018	1
1962	953	6
1961	1060	57
1960	938	23

PRIMARY VACCINATIONS OF THOSE AGED 0 - 4 years on 31st DECEMBER, 1963.

Born	1959	1960	1961	1962	1963	1959-63	Estimated Population Dec.1963
1963	-	-	-	-	509	509	1183
1962	-	-	-	425	496	921	1168
1961	-	-	452	506	9	967	1142
1960	-	413	499	14	3	929	1045
1959	357	469	53	5	1	885	968
Total vaccinated	357	882	1004	950	1018	4211	5506

TABLE X - VACCINATIONS (continued)

(d) WHOOPING COUGH (continued)

PERCENTAGE OF INFANTS WITH PRIMARY VACCINATION

Born	1959	1960	1961	1962	1963	1959-1963
1963	-	-	-	-	43%	43%
1962	-	-	-	36%	43%	79%
1961	-	-	40%	44%	1%	85%
1960	-	40%	48%	1%	0%	89%
1959	37%	48%	5%	1%	0%	91%
% of 0-4 vaccinated population Dec. 1963	6%	16%	18%	17%	19%	76%
% of 0-4 total popu- lation Dec. 1963	8%	21%	24%	23%	24%	100%

Diphtheria/whooping cough/tetanus combined vaccine was introduced in 1960 hence primary vaccinations from 1960 onwards are similar in number to diphtheria vaccinations.

COMPARISON WITH OTHER AREAS

	Dartford R.D.	Dartford Borough	Northfleet U.D.	Kent A. C.
Percentage of estimated population born 1962 vaccinated in 1962 or 1963	79%	83%	81%	80%

(e) TETANUS

In view of the introduction of the combined vaccine in 1960 the numbers of primary vaccinations against tetanus in 1962 and 1963 can be assumed to be almost identical with those of diphtheria vaccination.

(f) TUBERCULOSIS

Children in close contact with patients suffering from tuberculosis are, if necessary, vaccinated with B.C.G. The following vaccinations were carried out at the Chest Clinic, Dartford:-

Children under 15 years of age

	1959	1960	1961	1962	1963
Dartford R.D.	160	139	131	184	119
Dartford Borough	133	126	126	129	101

Some persons attend other clinics and therefore, these figures are incomplete.

Vaccination of school children is carried out by the School Health services. These children are skin tested and those who do not react are vaccinated. Those who do react are referred to the Chest Physician for further investigation. Figures are not available for the Rural District.

TABLE XI - INJURY
(a) ACCIDENTS IN THE HOME

Persons receiving in-patient treatment at the Dartford Group of Hospitals (D.G.) and Queen Mary's Hospital, Sidcup, (Q.M.)

Age	Falls		Burns & Scalds		Poisoning		Other		Total	
	D.G.	Q.M.	D.G.	Q.M.	D.G.	Q.M.	D.G.	Q.M.	D.G.	Q.M.
0- 4	2	1	1	2	2	-	-	6	5	9
5-64	5	-	1	4	1	-	-	2	7	6
65+	3	2	-	-	-	-	-	6	3	8
	10	3	2	6	3	-	-	14	15	23

Length of stay in hospital in weeks

	Under 1 week	1-	2-	3-	4-	8-	12-	13+	Cases
Dartford Group	6	3	2	1	1	1	-	-	15
Queen Mary's	2	-	1	1	-	-	1	-	5

No patients were admitted to the Gravesend and N.Kent Hospital for this from R.D.

Deaths

Female aged 3: Inhalation of foreign body
 " aged 78: Carbon monoxide poisoning due to home on fire
 Male aged 54: Coal gas poisoning (open verdict)

(b) MOTOR VEHICLE ACCIDENTS

Casualties(not necessarily R.D.residents)on local roads(Chief Constable's Analysis)

Local Authority	Total injury accidents	Killed	Seriously injured	Slightly injured	Total
Dartford R.D.	322	9	135	309	453
Northfleet U.D.	115	1	28	122	151
Swanscombe U.D.	63	1	24	57	82
Dartford M.B.	317	4	112	273	389

Deaths of R.D. residents not necessarily on R.D. roads

		Place
8 years	F Pedestrian/Coach	High Street, Swanley
19 years	M Motorcycle/car	?
21 years	F Passenger in car	?
48 years	M Motorcycle ran off road	?
49 years	M Scooter/van	?
59 years	M Car ran off road	Maidstone By-Pass
67 years	F Pedestrian/van	Mental Hospital grounds
73 years	M Pedestrian/car	A.20 West Kingsdown

(c) OTHER ACCIDENTS

20 years	M Collision between boat and steamer (drowned)	River Thames, Richmond
----------	--	------------------------

(d) SELF NEGLECT

80 years	M Gangrene in both feet due to frostbite	Outside home
70 years	F Exposure to cold	Caravan, West Kingsdown
73 years	F Exposure to cold	" "

(e) SUICIDE

47 years	M Barbiturate poisoning	Cotton Lane, Stone
55 years	F Coal gas poisoning	At home
85 years	M -do-	" "

ENVIRONMENTAL MATTERS

APPENDIX I - HOUSING

NEW HOUSES: The following dwellings have been completed in the last five years:-

	1959	1960	1961	1962	1963
By Dartford Rural District Council	88	131	154	137	108
By private enterprise	<u>637</u>	<u>430</u>	<u>513</u>	<u>269</u>	<u>301</u>
	<u>725</u>	<u>561</u>	<u>667</u>	<u>406</u>	<u>409</u>

HOUSING PROVIDED BY COUNCIL: the effective waiting list of housing applicants at the end of March 1963 and March 1964 numbered 1301 and 1348 respectively (inclusive of engaged couples), the total registered applications for the year ending March 1963 was 1485 and for the year ending March 1964 was 1545. The difference between the effective and total list is due to applicants rehoused or applications cancelled. The number of families rehoused during the last three years have been as follows:-

Families Rehoused

	April-March 1961-62	April-March 1962-63	April-March 1963-64
Ash-cum-Ridley	3	-	4
Fawkham	1	-	3
Hartley	2	-	6
West Kingsdown	5	9	12
Longfield	4	2	6
Southfleet	4	2	5
Betsham	-	1	3
Bean	1	3	1
Darenth	14	13	2
Stone	35	24	15
Eynsford	7	8	1
Farningham	2	2	3
Horton Kirby	7	7	4
South Darenth	4	4	5
Sutton-at-Hone	5	3	6
Swanley	40	50	47
Crockenhill	6	6	9
Hextable	5	3	6
Wilmington	13	7	15
Hawley	3	2	6
Outside Rural District	<u>20</u>	<u>24</u>	<u>30</u>
	<u>181</u>	<u>170</u>	<u>189</u>

During the above three years 256, 184 and 188 Council tenants were moved to accommodation more suited to their requirements.

HOUSING PRIORITY ON MEDICAL GROUNDS:

<u>Tuberculosis</u>				<u>Other than Tuberculosis</u>			
No. of Applications for Council accom.	No. of Points given; 0 1-5 6 -10			No. of Applications for Council accom.	No. of Points 0 1 - 5		
6	6	-		78	20	58	
Appl. for transfer from Council Tenants	-	-	-	20	3	17	

Number rehoused after being awarded some degree of medical priority:

<u>Tuberculosis</u>	<u>Other than Tuberculosis</u>
3	47

APPENDIX I - HOUSING (continued)

IMPROVEMENT GRANTS:

Number of Houses

Applications for discretionary grants	1	3
Applications for standard grants	82	85
Total cost for providing discretionary grant amenities		£750 (applied for)
Total cost for providing standard grant amenities		£8215

IMPROVEMENT WORK COMPLETED IN 1963:

Standard grants:	Total amount of grants	£6860	60 houses
Discretionary grants:	ditto	Nil	Nil

710 visits were made in connection with this work.

UNFIT HOUSES MADE FIT:

	By Owner	By Local Authority
After informal action by local authority	75	-
After formal notice under (a) Public Health Acts	15	-
(b) Section 24 Housing Act, 1957	1	-

REPAIRS: The following are the details of repairs initiated by the Council's Public Health Inspectors:

Water pipes repaired	10
Yard paving repaired	5
Floors repaired	13
Roofs repaired, overhauled and made weatherproof	19
Wall plaster and ceiling plaster repaired	36
Windows repaired including sashcords	32
Rainwater pipes and gutters repaired or renewed	21
Damp proof courses provided	2
External rendering to walls and pointing	7
Chimney stacks and pots	2
Sub floor ventilation improved	-
New sinks provided	1
Sink wastepipes repaired or renewed	1
Flushing cisterns renewed or repaired	8
Soil and ventilating pipes repaired	4
Water closets pans renewed	10
Houses provided with new dustbins	5
Other defects	43

Visits paid by the Council's Public Health Inspectors 3,655

RENT ACT, 1957: The following certificates have been received and issued:-

Applications received for Certificates of Disrepair	3
Notices issued to landlords (Form J)	2
Undertakings received from landlords (Form K)	1
Certificates of Disrepair issued	2
Applications received for cancellation of Certificates of Disrepair (Form M)	1
Certificates of Disrepair cancelled	1
Certificates issued as to remedying defects (Form P)	2

Visits paid by the Council's Public Health Inspectors 10

APPENDIX I- HOUSING (Continued)

HOUSES DEMOLISHED - HOUSING ACT,1957

	Houses demolished
In Clearance Areas: (Housing Act,1957)	
Houses unfit	10
Not in Clearance Areas:	
As a result of action under section 17	12
Unfit Houses Closed:	
Under sections 16 & 17 etc.	Nil

ADDRESSES OF HOUSES DEMOLISHED OR CLOSED:

41-59 (odd) Milestone Road, Stone
 2 & 4, High Cross Road, Westwood
 The Hut, Wested Farm, Crockenhill
 1-5, Victoria Cottages, Betsham
 3 & 4, Green Bungalows, Hulbury
 1 & 2, Cherry Tree Cottages, West Kingsdown

DEMOLITION AND CLOSING ORDERS MADE:

Number of demolition orders issued	8
Number of closing orders issued	Nil
Number of undertakings not to be used for habitation	1

PERSONS DISPLACED:

	Persons	Families
In Clearance Areas:	Nil	Nil
Houses unfit		
Not in Clearance Areas:		
As a result of action under Section 17	27	8

CARAVANS:

The number of sites licensed under the act	29
The total number of caravans permitted by licence on these sites	430
Visits paid by the Council's Public Health Inspectors	101

APPENDIX II - WATER

GATHERING GROUND. The chalk below this district is part of the gathering ground for N.W. Kent. The wells of the Metropolitan Water Board, Mid Kent Water Company and the Medway Water Board draw water from here to supply this and neighbouring districts. The Lullingstone estate has a small supply of its own. One hospital has its own supply which is supplemented with Met. water. Certain factories have their own wells for industrial purposes.

ACCESSIBILITY OF SUPPLY. With a few exceptions, all dwellings have water piped into them from these sources and the quantity is abundant.

QUALITY. Apart from two dwellings on their own domestic supplies, the quality of water supplied generally is excellent.

SOURCES OF SUPPLY AND ACCESSIBILITY

Piped supplies into houses. The estimated position on 31.3.64 was as follows:-

	<u>Parish</u>	<u>Houses</u>	<u>Totals</u>
Metropolitan Water Board	Darenth	1079	
	Crockenhill	441	
	Eynsford	546	
	Farningham	446	
	Horton Kirby	746	
	Southfleet	392	
	Stone	2162	
	Sutton-at-Hone	1131	
	Swanley	4037	
	Wilmington	<u>2258</u>	13238
Mid Kent Water Company	Ash	312	
	Fawkham	180	
	Hartley	917	
	Longfield	609	
	Southfleet	201	
	West Kingsdown	<u>1065</u>	3284
Lullingstone Estate	Eynsford	65	}
Houses on supply of Darenth	Darenth	8	
Park Hospital			
1 House supplied by laundry well			
Barn End Lane	Wilmington	1	
1 House supplied by well at			}
A.P.C.M. Clay Pit, Bean	Stone	<u>1</u>	
			75
<u>Supplies not piped into houses</u>			
Domestic well, Clement Street	Sutton-at-Hone	1	}
Rainwater tanks	West Kingsdown	1	
	Darenth	1	
Transported water	Farningham	2	}
Standpipe (Met.W.B.)	Horton Kirby	<u>1</u>	
			<u>6</u>
			16603
<u>Piped supplies into hospitals</u>			
Metropolitan Water Board	Stone	Stone House Hospital (Pop.500)	
Metropolitan Water Board and Hospital well	Darenth	Darenth Park & Mabledon Hospitals (Pop.2250)	

APPENDIX II -WATER (continued)

QUALITY

Bacteriological Analyses

Sampling by water undertakers

No. of samples

E.coli type I/100 ml.

Metropolitan Water Board

Raw water	2173	see table
Treated water	1959	None

Medway Water Board

Raw water	104	see table
Treated water	103	None

Mid Kent Water Company

Raw water	12	None
Treated water	12	None

Medway Water Board

Raw water.

No. of results showing stated count

Probable No. per 100 ml.	None	1-9	10-19	20-29	30-39	40-49	50-89	90-180	180+	Samples
Coliform	64	28	3	3	1	1	1	None	3	104
E.coli type 1	76	22	3	1	1	None	1	None	None	104

Metropolitan Water Board

Raw water

Well	No. of samples	Plate count per ml.		Coliform count		Escherichia coli count	
		20-24 hours at 37°C.	3 days at 22°C.	% samples negative in 100 ml.	Count per 100 ml.	% samples negative in 100 ml.	Count per 100 ml.
Darenth	251	0.0	10	99.20	-	99.20	-
Dartford	241	1.1	167	97.93	1.4	100.0	-
Eynsford No.1	235	1.7	37	83.40	0.9	99.57	-)
Eynsford No.2	122	0.5	15	91.80	0.3	99.18	1)
Green St.Green	249	0.1	42	98.39	2.5	99.20	-
Horton Kirby No.1	177	0.0	79	96.61	0.1	98.31	0.1)
Horton Kirby No.2	196	0.0	5	97.96	0.1	98.47	0.1)
Lullingstone No.1	157	9.4	57	100.0	-	100.0	-)
Lullingstone No.2	102	0.3	9	99.02	-	100.0	-)
Southfleet	246	0.8	14	98.78	0.1	100.0	-
Wilmington	197	0.2	51	97.97	-	99.49	-

APPENDIX II-WATER (continued)

QUALITY (continued)

Sampling by Hospitals

		<u>No. of samples</u>	<u>E.coli type I</u>
Stone House	Treated water	30	None
Darenth Park	Raw water	24	None
	Treated water	24	None
Mabledon Hospital		Nil	

Sampling by Council's Public Health Inspectors

Lullingstone Estate	Treated water	1	6
		5	None
Darenth Wood Farm	Rainwater	2	1 and 180
Ayres Nursery well	Clement Street	3	0
Claypit well, Bean (Shell Bank Farm)		2	0
Laundry well, Wilmington (also one dwelling)		1	0
Factory, Eynsford		1	0

SWIMMING POOLS

There are four pools in this district. All are provided by private enterprise except one, i.e., that of the Education Committee's special school. The latter was not sampled in 1963 as it was undergoing modification. The private enterprise pools were on continuous circulation and filtration and chlorination. With this system the standard aimed at is that no sample should contain any coliforms in 100 ml. of water; that in 75 per cent of the samples, the plate count should not exceed 10 colonies and that in the remainder the count should not exceed 100 colonies.

Source		<u>Probable numbers per 100 ml.</u>		<u>Plate count per ml. 24 hr. 37°C</u>
		<u>Coliforms</u>	<u>E.coli I</u>	
Pool A	Shallow end	1	0	10
	Deep end	0		6
	Shallow end	1		9
	Deep end	1	0	20
	Shallow end	0		1
	Deep end	1	0	0
	Shallow end	0		1
	Deep end	0		1
	Shallow end	0		2
	Deep end	0		0
	Shallow end	0		1
	Deep end	0		3
Pool B	Shallow end	0		1
	Deep end	0		3
	Shallow end	0		20
	Deep end	0		0
	Shallow end	0		0
	Deep end	0		0
Pool C	Shallow end	0		0
	Deep end	0		0
	Shallow end	0		0
	Deep end	0		0
	Shallow end	0		0
	Deep end	0		1

(Milligrammes per litre, averages of results)
Water (continued) Quality (continued)

Well	No. of samples	Ammonia Nitrogen	Albuminoid Nitrogen	Nitrate Nitrogen	Chlorides as Chlorine	Oxygen absorbed in 4 hrs at 27°C.	Hardness Total	Hardness (non-carb)	pH value	Natural Fluoride as Fluorine	Sodium as Na.	Potassium as K	Conductivity, reciprocal megohms
<u>Met. Water Board</u>													
Darenth	5	0.010	0.015	4.8	18	0.20	266	32	7.1	0.15*	11.0	1.9	480
Dartford	4	0.005	0.016	4.1	21	0.04	278	48	7.1	0.15*	12.0	3.1	510
Eynsford	7	0.003	0.021	3.7	15	0.02	260	30	7.2	0.2*	9.0	1.2	470
Green St. Green	8	0.014	0.017	6.3	17	0.04	282	30	7.1	0.1*	11.0	2.0	510
Horton Kirby	8	0.007	0.018	4.4	19	0.06	264	40	7.2	0.15*	10.0	1.8	490
Lullingstone	6	0.021	0.022	3.4	15	0.06	258	26	7.2		8.5	1.2	480
Southfleet	4	0.008	0.024	5.6	18	0.06	292	28	7.2	0.15*	11.0	1.8	530
Wilmington	3	0.016	0.016	6.9	23	0.20	282	44	7.2	0.15*	15.0	2.2	550
<u>Medway Water Board</u>													
Fawkham Pumping Stn	6	0.006	0.000	5.1	20	0.14†	292	38	7.3	0.0*			514
<u>Mid Kent Water Co.</u>													
Hartley Pumping Stn	3	0.000	0.000	5.3	15	0.07	275	33	7.3	< 0.1*			488
<u>Private Supply</u>													
Lullingstone Estate	1	0.000	trace	3	24	0.22	288	38	7.9	0.14			

* fluoride results of separate samples.

† Fawkham Pumping Station oxygen absorbed 3 hrs at 37°C.

APPENDIX III - DRAINAGE

During the period covered by this report all the 108 dwellings built by the Council and 248 of the 301 dwellings built by private enterprise were connected to the sewer. The remaining 53 dwellings built by private enterprise were connected to cesspools.

The following are the details of the work initiated by the Council's Public Health Inspectors:

	1962	1963
Pail closets abolished and property connected to sewer	1	-
Pail closets abolished and property connected to cesspool	-	-
Cesspools abolished and property connected to sewer	246	208
Drainage relaid	-	-
Drains repaired	7	10
Drains cleared	84	72
Covers renewed to inspection chambers and cesspools	3	9
Water tests applied to drains	277	144
Smoke tests applied to drains	2	30

At the end of the year the sanitary accommodation and drainage was approximately as follows:

Dwellings with water closets discharging into sewer	13007
Dwellings with water closets discharging into septic tanks	181
Dwellings with water closets discharging into cesspools being emptied	1935
Approx. number of dwellings with water closets discharging into cesspools not emptied	1480
	<hr/> 16603 <hr/>

We are not now aware of any dwellings provided with pail closets or privies. We know of one dwelling with a chemical closet.

Hartley/Longfield/New Barn Sewerage Scheme: The work on this new sewer was continued during the year and 208 properties were connected to the sewer during this time. In 1963 this further extension of the sewer provided for the drainage of the following areas:

Church Road, Hartley	Hillview Road, Longfield
The Drive, Longfield	Longfield Avenue, New Barn
Fairby Lane, Hartley	Main Road, Longfield
Fawkham Avenue, New Barn	New Barn Road, New Barn
Green Street Green	Poplars Close, New Barn
Gorsewood Road, Hartley	Pescot Avenue, Longfield

Stone Outfall Works: Drainage from the Parish of Stone is to the Stone Outfall Works and owing to the limitations of these Works, the effluent cannot be as good as could be desired. There are plans for treatment of the effluent elsewhere but in the meantime, owing to the smallness of the flow the relatively minute contribution of pollution to the River Thames must be insignificant.

APPENDIX IV - FOOD HYGIENE

FOOD PREPARATION. 204 inspections were made by the Council's Public Health Inspectors and 22 informal notices were issued to secure compliance with the Food Hygiene Regulations. The following defects were remedied during the year.

Wash-hand basins provided	3
Sinks for washing equipment	8
Hot water supply provided	2
Locker accommodation for employees clothes	1
First Aid equipment provided	2
Cleanliness and repair of food rooms	16
Sanitary accommodation labelled	6
Miscellaneous repairs	18

REGISTERED PREMISES. Regulations require this Council to register distributors of milk, i.e. dairymen other than dairy farmers.

	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>
Total number of distributors on register	31	33	38	46

The Food and Drugs Act, 1955 requires certain premises to be registered. Those registered in 1963 were as follows:

	<u>1963</u>	<u>Total registered</u>
Sausage making and cooked meats	1	12
Storage and sale of ice cream	5	150
Manufacture and sale of ice cream	-	-

MEAT INSPECTION. The following carcasses were inspected by the Council's Inspectors.

	Cattle excluding cows	Cows	Calves	Pigs
Killed	Nil	3	23	132
Inspected	Nil	3	23	132

All diseases except tuberculosis and cysticercosis.

Whole carcasses rejected	Nil	2	1	1
Part of carcasses rejected	Nil	1	1	2
Percentage diseased	Nil	100%	9%	2%

Tuberculosis only.

Whole carcasses rejected	Nil	Nil	Nil	Nil
Part of carcasses rejected	Nil	Nil	Nil	9
Percentage diseased	Nil	Nil	Nil	6.8%

Cysticercosis.

Carcasses of which some part was rejected	Nil	Nil	Nil	Nil
---	-----	-----	-----	-----

SLAUGHTERING. The only slaughterhouse in use in the district in 1963 was that at the farm of Stone House Hospital and it was at that slaughterhouse that the above inspections were made. This slaughterhouse was under the control of the Hospital Management Committee and so did not require licensing. It was however closed during the year.

	<u>1961</u>	<u>1962</u>	<u>1963</u>
Number of Slaughtermen licensed	16	15	9

APPENDIX IV - FOOD HYGIENE (continued)

SEIZURE OF UNSOUND FOOD. In addition to the rejected meat the amount of unsound food surrendered in 1963 was:-

<u>Meat</u>	<u>Other Foods</u>
5989 lbs beef	6 $\frac{1}{4}$ tons carrots
48 lbs lamb	694 pkts frozen foods
29 lbs miscellaneous	9464 tins of various foods

The unsound beef surrendered was from premises recently opened in the district for the packaging of meat. No unsound food had to be seized.

FOOD UNFIT FOR CONSUMPTION EXPOSED FOR SALE. The items of food, the fitness of which was the subject of complaint to this office by customers were:-

	<u>Number</u>	<u>Confirmed</u>
Soiled dough	2	2
Old stock	1	1
Moulds	5	5

These were transferred to the Kent County Council for submission to the Public Analyst and for action to be taken by them. Action taken resulted as follows:-

Brazil toffees	Rancidity (in nuts)	Makers notified. Old stock. Withdraw
Beef chipolatas	Mould growth	£10 fine plus £6. 9. 0 costs.
Steak & kidney pies	Mould growth	Written caution.
Steak pie	Mould growth	-do-
Apple turnovers	Mould growth	£10 fine plus £5. 5. 0 costs.
Apple pie	Mould growth	Written caution.
Sliced loaf	Soiled dough	£75 fine plus £21. 2. 6. costs.
Sliced loaf	Soiled dough	£20 fine plus £15. 3. 0 costs.

LABORATORY EXAMINATIONS.

Ice Cream. Four samples of ice cream were taken for the methylene blue test and all were Grade II i.e., regarded as satisfactory.

Milk. Milks sampled for designation tests by Food and Drugs Authority were:

	<u>Satisfactory</u>	<u>Unsatisfactory</u>
Pasteurised Milk	27	0
Tuberculin tested pasteurised	24	0
Sterilized milk	0	0

Among 49 milk samples analysed for food content, a number were submitted to designation tests. One pasteurised and two tuberculin tested pasteurised failed the Methylene Blue test.

Meat. Specimens from 2 carcasses submitted to the Hospital Laboratory were reported on as follows:

- Calf: Tissue from lung. Chronic bronchopneumonia with abscess formation in which are colonies of cocci. No fungi seen.
Film: No acid Fast bacilli. Culture: B.Subtilis + B.coli + Haemolytic streptococci +
- Cow: Section of masseter muscle. Granulomatous abscess.
No evidence of cysticercosis the most likely aetiology being fungus. No evidence of T.B.

APPENDIX V - FOOD CONTENT

Sampling. Details of samples taken by the County Sampling Officers within the Dartford District during 1963 were as follows. The samples were taken by the County as this Rural District is not a Food and Drugs Authority.

Summary

Milk	49
Drugs	11
Spirits	10
Other samples	<u>79</u>
	149

Of the 149 samples taken for analysis all were satisfactory with the exception of:-

<u>Sample of</u>	<u>Analysis</u>	<u>Action taken</u>
Pork sausages	Total meat content 56%.	Written caution
Vitamised Iron and Yeast Tablets	Vitamen B ₁ 44 I.U. per tablet. Formula stated 70.	Written caution. Stocks withdrawn.
Meat pies	Meat 16% (reasonable standard 25%.)	Written caution.
Milk	Bottle caps in milk.	-do-
Milk bottle containing foreign matter	Deposit of the nature of cement in bottle. Insoluble in milk,	-do-
Dried figs	Contained vegetable and animal hairs and one mite.	Importers informed.
Apricot Conserve	Soluble solids 63% (low) fruit standard not less than 65% .	Follow-up sample satisfactory
Portion of large loaf	Contained small insect probably a moth.	Written caution

CUSTOMERS' COMPLAINTS. A sample was brought to the Dartford Rural District office and transmitted to the Food and Drugs Authority. The result of the action taken is as follows:-

Eccles cake	Contained cigarette end.	Proceedings taken. £20 fine plus £8. 15. 0 costs.
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APPENDIX VI - RADIOACTIVITY

FOODSTUFFS. The County Analyst referring to 1963 and the whole county wrote -

"It will be remembered that milk and dairy products are the main source of radioactive material in the diet and therefore special emphasis has been placed on milk, the samples examined being a composite of all those received under the Food and Drugs Act each month.

The resumption of the testing of atomic weapons in the autumn of 1962 caused a rise in the amount of contamination, but due to the time lag before the debris from these explosions began to sink down to the lower atmosphere and the unusually dry winter of 1962-3, the effect of this rise was spread over a period of some months.

In the absence of further weapon tests it is anticipated that the amounts of the longer lived radioactive elements, such as Strontium 90 will gradually decrease, although a temporary rise may occur in the spring of 1964 due to the annual cycle of weather and crops.

The expected more rapid decrease in the amounts of the shorter lived radioactive elements has occurred and the amount of Strontium 89 fell to a level below that of accurate determination by the late autumn of 1963. The much shorter lived element Iodine 131 has not been detected since the end of 1962.

The significance of levels of Strontium 90 found in foods may be assessed by comparison with the "working levels" recommended by the Medical Research Council of 400 Strontium Units in the diet of individuals and of 130 Strontium Units in the diet of the population as a whole".

PICOCURIES STRONTIUM 90

Milk and Canteen Meals

1963	Milk		Canteen Meals	
	Per litre	Per gm Ca.*	Per kilo	Per gm Ca.*
1st qr.	10	9	15	18
2nd qr.	23	20	20	24
3rd qr.	34	30	26	33
4th qr.	33	28	34	38

Other Specific Items of Food

Month	Article	Per kilo	Per gm Ca.*
February	Carrots	2.4	7.5
February	Cabbage	7.7	10.7
February	Potatoes	1.4	15.0
March	Sprouts	16.6	35.0
May	Plain Flour	5.9	4.0
May	Spring Greens	52.0	28.0
May	Watercress	67.0	45.0
May	Wholemeal Flour	33.0	27.0
June	Lettuce	70.0	90.0

* i.e. Strontium 90 Units

INDUSTRY. In accordance with the Radioactive Substances Act, 1960, one firm was registered by the Ministry for the use in their research department of one source of not more than 20 millicuries of Strontium 90.

APPENDIX VII - REFUSE DISPOSAL

Within the area of this district there are four controlled tips, two of which are run by Local Authorities and two by a private company.

One tip at Longfield Hill which takes the refuse from a Metropolitan Borough has been in operation since 1899. This tip has presented problems in the past, due mainly to the method of transport of refuse to the tip.

Until about two years ago, refuse came by rail to sidings at the tip, the wagons being discharged at the sidings and the refuse being bulldozed from that point to the tip face. This method gave rise to nuisance as much refuse was strewn over the surface of the tip on the way to the tip face. Furthermore, adequate covering was not obtained which resulted in fly breeding and paper litter being blown from the tip.

This method of transport has now been changed to road transport and vehicles are now able to deposit the refuse at the tip face. Even so, inspections made from time to time have shown that owing to the inadequate covering, the tip is not always satisfactorily maintained. Suitable covering material is not always easy to obtain and settled refuse from other parts of the tip is being used as covering material. It is felt that the time is near when, after giving good service and fulfilled its purpose, this tip should be closed. This is a matter for immediate study when the new boroughs formed by Local Government re-organization come into being.

A disused claypit is also used as a controlled tip by another local authority and receives about 23,000 tons per year. This tip has been well maintained although from time to time during adverse weather conditions there has been some nuisance by paper being blown from the tip.

The private company have three disused chalkpits at their disposal and began operating the second of these when the first pit was practically full. Approximately 200,000 tons of refuse per annum from several Metropolitan Boroughs is being disposed of in this tip and the tip is used by this Council now that our tips are closed. Owing to adverse weather, mechanical failure and/or sickness of workmen, it would be almost impossible for a tip handling this quantity of refuse not to give rise to some nuisance from time to time.

However, the company are anxious to co-operate with us in the running of this tip, the tip is operated in an efficient manner, there being good covering and an absence of fly infestation. They have a contract with the Council for Rodent Control. Unfortunately, this tip is sited very close to a hospital from whom complaints have been received regarding dust and paper blowing from the tip.

Although it is felt that tipping cannot be carried on at this scale without at times some nuisance, and although the site is unfortunate, the duration of the operation is limited in years and there will be long-term benefit.

With close attention from the Council's Public Health Inspectors and the co-operation of the tip operators, we feel that this tip is being operated in a satisfactory manner.

APPENDIX VIII - NOISE

During the year complaints were received regarding noise from barking dogs, repair work in private premises, "beat" group bands, grain drying, chimes of ice cream vans and panel beating. They were investigated with the provisions of the Noise Abatement Act, 1960 in mind.

Abatement of the nuisance however, was secured by informal action, except in the case of nuisance from barking dogs. Complaints of noise of this nature or intermittent noise generally are difficult to assess as to whether they are nuisances, and investigation is long and time consuming.

APPENDIX IX- RODENT CONTROL, DISINFECTION & DISINFESTATION

The following is a summary of the work carried out by the Council's Rodent Operators:

RODENTS:	1961	1962	1963
No. of complaints received	291	279	300
Infestations found			
Rats, major	-	1	-
Rats, minor	258	242	267
Mice, major	-	-	-
Mice, minor	28	25	30
Infestations found as a result of a survey:			
Rats, major	-	-	-
Rats, minor	9	2	-
Mice, major and minor	-	-	-
Business premises treated (except agricultural)	38	16	45
Private dwellings treated	370	241	247
Agricultural properties surveyed	4	-	-
Agricultural properties treated	5	11	5
Total number of treatments:	413	268	297
Estimated kill, Ministry of Food formula:			
Rats	1120	832	753
Dead bodies found:			
Rats	1050	1175	366
Mice	75	148	35
By traps or other means:			
Rats	21	54	-
Mice	-	-	-
Sewer treatment:			
Manholes tested	-	-	-
Infestations found	-	-	-
Infestations treated	-	-	-
DISINFESTATION:			
Council houses disinfested of bed bugs	1	1	-
Private dwellings -ditto-	6	2	1
Council houses disinfested of fleas	1	-	-
Private dwellings -ditto-	-	-	1
Houses disinfested of ants	15	14	11
Houses disinfested of wood-worm	-	1	-
Houses disinfested of beetles	7	1	5
Houses disinfested of swarms of flies	2	9	3
Houses disinfested of swarms of bees	6	6	1
Wasps nests destroyed	138	38	94
Houses disinfested of silver fish	-	-	1
Houses disinfested of cockroaches	-	-	1
Houses disinfested of earwigs	-	2	5
Houses disinfested of red spider	-	2	-
Houses disinfested of moles	-	3	-
Houses disinfested of moths	-	1	-
Houses disinfested of frogs	-	1	-
Houses disinfested of other insects	-	8	1
DISINFECTION:			
Housing, bedding etc, disinfected after infectious disease	11	5	-

FLY NUISANCE:

In February 1963 and subsequently, complaints were received of fly infestation in a house adjacent to a poultry farm. The complainant was convinced that the infestation arose from poultry manure at the farm but the flies were identified by the Natural History Museum as Cluster Flies. These had apparently been hibernating in the roof space of the complainants house and the increased heating necessary in the house during the severe winter had been sufficient to deceive the flies that summer had come.

Nevertheless, much work was done by the Council's Public Health Inspector in searching for possible breeding places of house flies in farms adjacent to the house and village and in securing removal and adequate disposal of manure.

Although this district has urban developments in rural areas, the only powers available to deal with removal of manure etc, was then Section 93 (Abatement of Nuisances) of the Public Health Act, 1936. We felt that in order to be able to deal effectively with noxious matter which could be a breeding ground for flies that Section 79 and 80 of the Public Health Act, 1936 should be made applicable to this district and the Council asked for these powers to be made available to the District Council.

In December, 1963, the Minister made the Dartford Rural District (Urban Powers) order 1963, which stated that from January 1964, Sections 79 and 80, Public Health Act, 1936 would be in force in the Rural District. These provide powers to require the removal of fly breeding material from premises when necessary. Although co-operation from farmers has been forthcoming with regard to the disposal of manure and the prevention of fly breeding, these additional powers will be useful if immediate action is necessary.

APPENDIX X - AIR HYGIENE

MEASUREMENTS. The monthly collections of deposit and the changes of exposed lead dioxide analysed by the County Analyst, and the daily measurements of smoke and acidity made in this office were included in the readings for the whole Thameside area distributed by the Thameside Joint Committee for the Abatement of Atmospheric Pollution.

DOMESTIC SMOKE. No smoke control orders have been made in respect of this district and it is a matter for conjecture as to whether the Minister would be prepared to confirm an order in respect of a Rural District in view of the question of availability generally of solid smokeless fuels, and the probable priorities for the denser areas of population.

INDUSTRIAL SMOKE. During 1963 there was no smoke nuisance from industrial premises requiring action by this Council.

APPENDIX XI - PLACES OF WORK

FACTORIES:

Under the Factories Acts the district council enforces the following Sections: (a) Section 7 (sanitary conveniences) in all factories (b) Sections 1, 2, 3, 4, 6 (cleanliness, temperature, ventilation and drainage of floors) in all factories where mechanical power is not used.

The following work was carried out by the Council's Public Health Inspectors:

1. INSPECTIONS UNDER PART I, FACTORIES ACT, 1961.

Premises	Number on register	Number of Inspections	Number of written notices	Number of occupiers prosecuted
i) Factories in which sections 1,2,3,4 & 6 are to be enforced by the Local Authority	9	-	-	-
ii) Factories not included in (i) in which S.7 is enforced by the Local Authority	112	39	8	-
iii) Other premises in which S.7 is enforced by Local Authority (excluding outworkers' premises)	24	1	-	-
Totals	145	40	8	-

2. PARTICULARS OF DEFECTS FOUND:

Particulars	Number of defects found	Defects remedied	Referred to H.M. Inspector	Referred by H.M. Inspector	Number of prosecutions
Section 1	-	-	-	-	-
Sections 2,3,4 & 6	-	-	-	-	-
Section 7 (Sanitary conveniences)					
(a) Insufficient	1	1	-	-	-
(b) Unsuitable or defective	7	7	-	-	-
(c) Not separate for the sexes	-	-	-	-	-
(d) Other offences against the acts (excluding outworkers)	-	-	-	-	-
Totals	8	8	-	-	-

APPENDIX XI- PLACES OF WORK (continued)

OUTWORKERS:

(a)	Total number of outworkers notified to the Council by firms in the Dartford Rural District under Section 110 (1c) Factories Act 1961.	54
(b)	Total numbers of outworkers notified by Dartford Rural District Council to other Councils under Section 110 (2) Factories Act, 1961	15
(c)	Total number of outworkers notified to Dartford Rural District Council by other Councils under Section 110 (2)	22
(d)	Total number of outworkers employed in Dartford Rural District	61
(e)	Total number of inspections of work-places under Section 111 (i) Factories Act, 1961	Nil
(f)	Scheduled occupations followed by outworkers in Dartford Rural District	
	Making wearing apparel	28
	Making of boxes or other receptacles or parts thereof made wholly or partially of paper, cardboard, chip or similar material	33

SHOPS:

There were 376 shops, including licenced premises in the rural area as at 31st March, 1964.

The total number of inspections during the period covered by this report by the Council's Public Health Inspectors of shops, other than food preparing premises, was 39.

WINTER

INTRODUCTION

The standards of environment including those of shelter and warmth vary in our community and whether these differences are merely a matter of amenity or whether they have also a substantial influence on health is a question of social importance. Below is a study of winter deaths which might contribute information on this subject.

COLD AND THE FRAIL

"The temperature of the body is the result of two factors - the production of heat and its loss. In elderly people the production of heat is diminished because their muscular activity is lower and even the basal metabolism may fall because of endocrine deficiencies. Loss of heat is increased in those elderly people who from poverty are unable to afford fuel or warm clothing or even draught-free, dry living-rooms". If they are confused they are likely to expose themselves to cold unnecessarily.

In the newborn and the aged, cold can disturb the body function through the lower body temperature, a condition which for technical purposes has to be named "accidental hypothermia". Hypothermia may cause death direct or may hasten death due to other underlying causes.

"Old people living alone are especially at risk, and each area should have a list of such people. Old people's welfare committees in their co-ordinating role are well placed to prepare such lists. Visiting by doctors and nurses, relatives and voluntary workers should be organised.... The old people should be given help, with insulation of their houses and provision of warm clothing and fuel, by official or voluntary services and should themselves be warned of the danger. National assistance boards can give special help in cold weather". (B.M.J. 14. 11. 64).

AIR

Winter is a time of air pollution. Not only are more combustion products created by the need for increased domestic heating but the pollution that is created cannot easily disperse. The cold ground denies the air its buoyancy. In addition to the general increase in air pollution there are acute episodes of fog which traps and concentrates the pollution which can then precipitate the failure of damaged lungs and crippled hearts.

INFECTIONS

A group of viruses make their presence felt in winter and the illnesses they cause are loosely termed "colds and flu" " whether or not a true influenza virus is responsible. This type of infection can contribute to death by tipping the balance in a person already in fragile health. Amongst the working population this is the most common cause of exacerbation of absence from work and the receipts of sickness benefit show that 1960 was the only recent year free from these infections. The accompanying graphs show the trend of sickness benefit and illustrate the effect of influenza in the working community.

WARMTH

The only warmth in winter is artificial and the air that has to be warmed has only the water in it that it can carry when cold. Most forms of heating thus result in a relatively dry air. This lessened humidity discourages some forms of germ life, e.g. moulds, but encourages others, e.g. those of upper respiratory infection (Hope Simpson, R.S.H. 1958) and dysentery (Tomlinson, unpublished). The drier the air the more numerous are deaths from bronchitis and pneumonia (Boyd, B.I.P.S.M. 1960). The air we want in winter needs to be moist enough to keep the lining of our windpipes turgid but dry enough to keep our clothes "aired" and warm. Apart from air conditioning this does not seem feasible in any class of home.

MANAGER and LABOURER

Expensive meals, costly transport, sleepless nights and repeated exasperation impose on the deteriorating manager a damaged heart to which cold may be the final burden. Life in crowds, fag-end smoking and chest infection impose on the deteriorating labourer damaged lungs to which air pollution or infection may be overpowering. Central heating in the "desirable residence" avoids the risks of cold but increases the chance of infection. Oil heating in lodgings diminishes the chance of infection but increases the risk of cold from damp beds and clothing. In the suburbs the aged have cold bedrooms in big and isolated houses while in the urban terraces their cottages are cosy, small and neighbourly. Even draughty houses are not without advantage in so far as the air they contain is never stale. The lonely may find winter a hazard to their mental health but the social gatherings of the gregarious transmit infections which assault their physical health. Once all are above the poverty line no one section of the community can monopolize the influences for opposing winter - January and February are

still to be reckoned with even if with less emphasis than in the past. (The house fly has a remedy. Air-insulated, he sleeps through winter cocooned in comfort in the moist fermenting warmth of the refuse tip, - provided he finds the right spot).

WINTER
1962-63

"The winter of 1962-63 was an exceptional one. A marked fall in temperature occurred on 22nd December and a period of exceptionally cold weather ensued and lasted until 4th March. Snow in greater or lesser amounts lay continuously in many parts of the country and at times there was considerable disorganization of transport. At Kew Observatory it was the coldest January since 1838 and in St. James' Park, London, the mean January temperature of 0.8°C was 5.4°C below normal for the month. The lowest temperature recorded in the country was -20.6°C on 23rd January."

London

"In London the effect of low temperature on mortality was not noticeable until immediately after Christmas by which time on December 26th the minimum temperature had fallen to -4°C . The daily mortality figures then rose continuously to reach maximum on 25th and 28th January and again on the 19th February. A period of particular heavy atmospheric pollution when the mean daily figures from seven London sites rose to 820ug per cubic metre of smoke and 1,230ug per cubic metre of sulphur dioxide corresponds to the period of high mortality from 23rd to 28th January."

"Little evidence of influenza virus infection was observed until the last week of January when outbreaks associated with influenza virus A2 were reported, mainly from southern England accompanied by an increase in the numbers of notifications from primary and influenzal pneumonia and of deaths from influenza and pneumonia. For several weeks influenza was largely confined to London and the south east, reaching a peak in London Administrative County in about the middle of February. In London influenza may have had an effect of keeping the morbidity and mortality rates at a high level for some time after the return of the warmer weather".

"The Emergency Bed Service data for respiratory diseases indicates that the age groups between 5 and 44 years show no noticeable seasonal increase. Neither the polluted fogs nor the cold weather nor the influenza had any appreciable effect. The 45 - 79 year age groups showed the greatest increases both during the January - February period and as a result of

the individual peaks of high pollution. The record of the 0 - 4 age group is of particular interest as it shows a comparatively slight increase in morbidity during January and February, and no noticeable increase as a result of any of the pollution incidents". (C.M.O's report for 1963).

THE AGED LIVING ALONE

In Dartford Rural District the 1961 census report stated that the males aged 65 and over and the females aged 60 and over living alone were as follows:

Parish	Males	Females
Ash-cum-Ridley	2	11
Darenth	13	25
Eynsford	15	55
Farningham	5	25
Fawkham	4	7
Hartley	10	36
Horton Kirby	10	33
Longfield	11	23
Southfleet	3	25
Stone	29	103
Sutton-at-Hone	9	58
Swanley	21	115
West Kingsdown	17	49
Wilmington	<u>15</u>	<u>71</u>
Dartford R.D.	<u>164</u>	<u>636</u>

WINTER DEATH RATES

The adverse influences of winter outlined above may contain conjecture but one fact is clear namely that the complex blend of circumstances associated with winter is accompanied by a markedly higher death rate than pertains to other seasons. There was an exception in 1957 explained by the appearance of Asian influenza in the last quarter, a timing which was unusual.

Eng.& Wales	1st qr.	2nd qr.	3rd qr.	4th qr.	Year
1956	15.3	10.8	9.3	11.3	11.7
1957	12.2	10.6	9.7	13.4	11.5
1958	14.7	11.0	9.3	11.7	11.7
1959	15.8	10.6	9.0	11.1	11.6
1960	13.1	10.9	9.8	12.2	11.5
1961	15.5	10.9	9.5	11.9	11.9
1962	15.5	11.1	9.4	11.9	11.9
1963	17.0	11.0	9.6	11.2	12.2
Dartford R.D.					
1956*	13.9	9.4	7.5	10.8	10.5
1957*	10.8	7.4	8.4	11.7	9.6
1958*	13.6	8.3	8.7	9.6	10.0
1959	13.4	9.4	9.0	9.3	10.3
1960	11.3	11.0	7.9	10.3	10.1
1961	13.6	8.8	10.5	11.1	11.0
1962	14.1	10.1	9.5	12.7	11.5
1963	15.1	9.4	9.5	10.6	11.2

* adjusted for institutional deaths

Daily Volumetric Instrument. The Councils' Public Health Inspectors make daily measurements of the stain produced on filter paper by smoke and the acidity formed in hydrogen peroxide by SO_2 in measured quantities of air. Table A contains the measurements for the winter of 1963 and provides 1962 figures and those of Islington Metropolitan Borough for comparison. The figures indicate that in January and February 1963 air pollution was substantially greater than the winter average or the same months of 1962. This increase is displayed by the monthly average and not by highest daily concentrations owing to the increased pollution being over a prolonged period and not a brief acute episode. The increase was not as exceptional as the weather.

Lead dioxide candle. Hitherto this provided an inexpensive means of measuring SO_2 . It consists of a cylinder 1" diameter 4" long and wrapped round this is fabric on which is spread a gummy paste of PbO_2 . This, enclosed in a louvered box is placed in the outside air for a month and then the SO_2 caught by the PbO_2 is measured by the analyst. Although the gauge primarily measures the SO_2 its readings are a little influenced by the temperature, humidity, air friction and matter other than SO_2 contained in the air. For the limited objective of SO_2 measurement these features of the gauge are regarded as conveying inaccuracy and its use here has now been discontinued.

However, the effect of air pollution on the human lung is governed by a similar blend of circumstances. The temperature moisture content, air friction and content of extraneous matter are related to the damage done by the pollutants inhaled. The blend of pollutants and their circumstances may be more important than the amounts of the individual pollutants. If this is borne in mind it may be surmised that perhaps the inaccuracies of the lead dioxide gauge in chemical analyses might be informative for biological interpretation. The gauge, be it noted, is a crude imitation of the human windpipe turned inside out with the louvres of the box as nostrils and the granules of PbO_2 in the paste on the fabric are like cells clothed with mucus.

In 1963 the lead dioxide gauge was still in use in this district and the readings are given in Table B, they show a substantial increase over the usual figures for January and February in Dartford Borough but less so in the Rural District where the effectiveness of pollution remains only about half that of the urban areas. Again the increase was not as exceptional as the weather.

The smoke stain and the SO_2 are only measured as indicators of the degree of air pollution.

LOCAL
DIRECT
COLD
DEATHS
1963

The following deaths were directly attributable to cold:

Age	Sex	Place of onset	Place of death	Cause
63	F	Council House	Joyce Green Hosp.	Hypothermia
70	F	Caravan	Caravan	Exposure to cold (self neglect)
73	F	Caravan	Caravan	-ditto-
80	M	Cottage	Joyce Green Hosp.	la.Gangrene b.Frostbite c.Senility II.Br.pneumonia
86	M	Cottage	Joyce Green Hosp.	Hypothermia

The female aged 63 was a widow living alone who habitually neglected herself and to whom medical attention was unwelcome. Her house was unheated and she had been lying about for 3 days before her doctor was called. She declined to enter hospital then but after the lapse of a further day she agreed to go into hospital but died shortly after admission. Her relatives lived not far away.

The females aged 70 and 73 were sisters living together in a caravan on a caravan site. In view of their eccentricity and their reclusive way of living, there had been apprehension for their welfare since 1959 when an application for an order for removal to hospital or other suitable place had been given consideration but it had been concluded that such an approach to the Court was inappropriate. In January the sisters had not been seen for over a week and when the caravan was forced open they were found dead. There was sufficient fuel and money in the caravan for their needs. Examination of blood post-mortem showed no carboxy-haemoglobin.

The male aged 80 had been living alone in an isolated rural cottage access to which had become blocked in the severe weather. He had been in the snow wearing rubber boots without stockings and later developed what were regarded as chilblains. In early February he moved to his sister's house in an urban area. Circulation in his legs was poor owing to hardened arteries and he had in fact frostbite proceeding to gangrene. He was admitted to hospital and when his condition allowed it partial amputation was performed but he died from terminal pneumonia on 3rd April.

The male aged 86 was admitted to hospital as an emergency on being seen for the first time ever by his family doctor. He was in a neglected condition on admission, was semi-conscious and had a temperature of 86°F. He died not long after admission. He had lived with a relative in a rural cottage with neighbours and by a County class III road.

There were also in January and February 3 "cot" deaths (i.e.sudden infant deaths) attributed to respiratory disease. All well housed. Social classes III, V and V.

These are cases that died, if any such cases occurred but recovered or lingered I do not know nor can it easily be gauged how many deaths were contributed to by such disorders unrecognized. The question arises as to whether these deaths from direct cold and known through the Coroners Court or through hospital admission are the small seen part of a larger undisclosed problem. To use an appropriate metaphor, are these cases the exposed tip of an iceberg 9/10ths of whose bulk is hidden ?

ATH
GISTRATION

Essentially this is a question of statistics but in this small office our statistical material is sparse and our resources are limited. In regard to the incidence of ill health our information is confined to that of immediate public health importance. However, when death occurs civil needs outpace public health needs in providing a forceful incentive for complete registration and thus certain details surrounding each death are available for public health study. Thanks to the Registrars we have facts from death returns which by punch cards, knitting needle and slide rule are capable of analysis.

Thus it is that our study of the influence of winter environment will be based on a search for trends in the death records. The response of age, the change of emphasis, if any, on the prevailing causes of death and the share to each social class of the deaths recorded can in a crude way be extracted from our figures. It might be mentioned that the age and class constitution of the population each year will vary and for this reason it is the relationship of the winter quarter to the rest of the same year which is studied rather than comparisons of one year's absolute figures with another's.

IN CAUSE
DEATH

Classification is done in accordance with the international code of practice and the deaths are then assigned to the Registrar General's list of 36 causes. These are then grouped as follows:

Circulatory disease	Coronary, hypertensive and other heart and circulatory disease (R.G's.Nos. 18-21)
Cancer	All sites including leukaemia (No.10-14)
Vascular lesions of Nervous system	(No.17)
Respiratory disease	Influenza,pneumonia,bronchitis and other (Nos.22-25)
Other causes	The remainder (Nos.32)

SOCIAL
CLASS

Those with a memory of the interwar years will visualise a population in which the environmental needs were provided for by ability to earn and plan which in turn was related to social class. A classification of persons according to social class was made possible by the Registrar General who devised and kept revised a code of practice for the purpose. By use of the code different death rates could be discerned in each social class and these differences are still discernible. In essence, there are five classes as follows:

- Class I Professional etc.occupations
- II Intermediate occupations
- III Skilled occupations
- IV Partly skilled occupations
- V Unskilled occupations

Social class affects a death rate by the influence of past environment provoking chronic diseases different in kind and degree in different classes and by the influence of the immediate environment on the persons so affected. But interpretation is complicated - a high death rate in young age groups through poor environment may, through survival of the fittest, produce a more robust population in the older age groups.

The classification of the 5 deaths directly due to cold mentioned above was as follows:

Age	Occupation	Social class
63	Widow of builders labour	V
70	Spinster -no occupation	Unclassified
73	" "	"
80	Farm worker (retired)	IV
86	Bricklayer (retired)	III

Imperfections These records do contain imperfections. On rare occasions a death may be assigned to a wrong district or it may be registered late owing e.g. to an inquest. Social classification may be uncertain. The deaths occurring in our small population are of a number in which the play of chance should be taken into account. This memorandum is written by a layman in statistical methods.

As a safeguard in making comparisons we should regard our figures as having a variability of about 5% through error or through circumstances we cannot perceive.

TABLE C This table demonstrates the exacerbating effect of the winter influence but although the first quarter of 1963 shows a larger percentage than the first quarter of most other years, the difference is not large. It is larger in the age group of 75 years and over. Thus the severity of the 1963 winter had its effect and the aged were most affected. But the effect on the deaths occurring is not outstanding.

1959 had a superb and long summer yet in spite of this benefit no marked effect on the deaths is discernible. In 1958 Asian 'flu affected the younger age groups in the first quarter and their percentage of deaths is the only one to exceed the 1963 first quarter

TABLE D This allocates the deaths of 1958, 1959, and 1963 to the social classes, the purpose being to show the effect of winter on each of the different classes and whether any differences of degree are discernible. The pattern of distribution of the deaths by class each quarter can be seen to vary only very little. Thus winter accelerates death but does so evenly among the social classes.

(ii) In 1963 first quarter 20% of the deaths were in social class I & II compared with 17% for the year, i.e. a slight increase, while 27% of the deaths were in social classes IV & V compared with 32% for the year i.e. a slight decrease.

(iii) Similarly 38% of the years deaths occurred in the 1963 first quarter for social classes I & II whereas the percentage for social classes IV & V was 30%. If anything social classes I & II appear to come off worse than classes IV & V.

TABLE E This table carried out the same analysis for those aged 75 and over and produces the same results. A greater percentage of the years deaths occur in the first quarter amongst the aged than amongst all ages in table D, but the increase is the same for each class grouping.

TABLE F (i) Just less than half a years deaths occur at the age of 75 or over and a means of gauging the effect of winter on the aged is to compare the percentage of these deaths in winter with the percentage for the year. This table performs this exercise. The years showing greatest increases were 1959, 1961 and 1963. An effect of winter on the aged is discernible through an increase in the percentage in the first quarters but it is not marked and 1963 produced nothing exceptional.

TABLE F
(continued)

(ii) Amongst the social classes in the first quarter of 1963 the increase was much the same for classes I & II and for class IV & V being 55% to 65% and 47% to 55% respectively.

(iii) Did any cause of death show marked accentuation among the aged ? The percentages for 1962 and 1963 are given but no disease shows an outstanding difference from the percentage for the year and 1963 produced no outstanding difference in the pattern for the first quarter.

TABLE G

This table breaks the 1963 deaths down into the two age groups, into the six main causes of death, into the four social class groups and into the quarters of the year. The numbers resulting are small and the probability that differences may be due to chance is too great to use them for conclusions. They are presented therefore for interest only.

SUMMARY AND CONCLUSIONS

Winter is a blend of several adversities one influence of which is to increase the death rate in the first quarter of the year.

The first quarter of 1963 was a winter of exceptional severity and 5 deaths directly due to cold became known through hospital admission or coroner's court.

In an endeavour to find if a class or age group is affected by winter more than any other the details of winter deaths, particularly those of 1963, have been subjected to analysis.

The percentage of the years deaths which occur in winter is greater for those aged 75 years and over than for those under that age. This applies to all groups of social classes.

In deaths of the five social classes there was no one class group which showed an increase in the winter greatly differing from those of other groups.

The exceptional winter of 1963 produced no outstanding change in these patterns.

The five deaths of 1963 directly due to cold were related to self neglect and to circumstances peculiar to the deceased rather than pertaining to the population as a whole.

They did not appear to be the small revealed fraction of an extensive unseen misfortune due to inadequacy of the physical environment.

TABLE A
VOLUMETRIC INSTRUMENT MEASUREMENTS
Micrograms per cubic metre

		Dartford Borough Site 6			Dartford R.D. Site 8			Islington Met.B Site 1		
		Smoke	SO ₂	Ratio	Smoke	SO ₂	Ratio	Smoke	SO ₂	Ratio
Average concentration										
1961/62	Jan	143	186	0.77	97	139	0.70	88	252	0.35
	Feb	131	223	0.59	77	141	0.55	53	201	0.26
	March	129	195	0.66	95	155	0.61	152	270	0.56
	Apl/Sept	39	94	0.41	26	58	0.44	52	116	0.44
	Oct/Mch	140	180	0.77	-	-	-	111	264	0.42
1962/63	Jan	207	365	0.57	156	288	0.54	336	413	0.81
	Feb	213	294	0.72	151	211	0.72	301	320	0.94
	March	59	105	0.56	41	65	0.63	143	161	0.89
	Apl/Sept	39	100	0.39	31	63	0.49	63	107	0.59
	Oct/Mch	157	254	0.62	-	-	-	266	326	0.82
Highest daily concentration										
1961/62	Jan	687	739		400	965		236	542	
	Feb	374	475		189	294		157	508	
	March	436	389		345	437		249	520	
	Apl/Sept	123	288		190	192		200	349	
	Oct/Mch	714	739		461	965		443	1042	
1962/63	Jan	642	949		484	547		1128	1747	
	Feb	343	474		239	544		522	640	
	March	280	301		190	210		362	393	
	Apl/Sept	137	491		123	400		245	391	
	Oct/Mch	946*	1852*		1258*	1305*		1680*	3303*	

* The December 1962 fog

TABLE B
LEAD DIOXIDE INSTRUMENT
Milligrams SO₃ per 100 sq.cms.lead dioxide surface per day

		Dartford Borough Site 4		Dartford R.D. Site 8		Islington Met.B Site 1	
1961/62	Jan	1.6		1.0		2.8	
	Feb	2.8		1.2)		3.5	
	March	2.0		1.2)		3.4	
	Apl/Sept)	1.4		-		1.8	
	Oct/Mch)						
1962/63	Jan	3.4		2.0		3.1	
	Feb	3.0		1.4		3.0	
	March	1.6		0.7		2.0	
	Apl/Sept	1.1		0.4		1.1	
	Oct/Mch	2.5		1.3		2.4	

TABLE C

PERCENTAGES OF EACH YEARS DEATHS REGISTERED EACH QUARTER

(i) Deaths by quarters

All ages	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	year
1957	138	89	105	153	485
1958	174	100	105	116	495
1959	157	111	106	109	483
1960	127	124	89	116	456
1961	164	107	128	134	533
1962	170	122	112	154	558
1963	194	121	122	136	573

Aged 0-64

1957	82	45	72	89	288
1958	102	56	69	57	284
1959	80	71	63	59	273
1960	71	68	55	73	267
1961	72	56	78	80	286
1962	84	62	66	89	301
1963	93	72	76	74	315

Aged 75 and over

1957	56	44	33	64	197
1958	72	44	36	59	211
1959	77	40	43	50	210
1960	56	56	34	43	189
1961	92	51	50	54	247
1962	86	60	46	65	257
1963	101	49	46	62	258

(ii) Percentage of each years deaths registered each quarter

All ages	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Year
1957	28%	18%	22%	32%	100%
1958	35%	20%	21%	24%	100%
1959	32%	23%	22%	23%	100%
1960	28%	27%	20%	25%	100%
1961	31%	20%	24%	25%	100%
1962	30%	22%	20%	28%	100%
1963	34%	21%	21%	24%	100%

Aged 0 - 64

1957	29%	15%	25%	31%	100%
1958	36%	20%	24%	20%	100%
1959	29%	26%	23%	22%	100%
1960	27%	26%	21%	26%	100%
1961	25%	20%	27%	28%	100%
1962	28%	20%	22%	30%	100%
1963	30%	23%	24%	23%	100%

Aged 75 and over

1957	28%	23%	17%	32%	100%
1958	34%	21%	17%	28%	100%
1959	36%	19%	21%	24%	100%
1960	30%	30%	18%	22%	100%
1961	37%	21%	20%	22%	100%
1962	34%	23%	18%	25%	100%
1963	39%	19%	18%	24%	100%

TABLE D

(i) Deaths according to social class. All ages. All causes

1958	Class	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Year
	I	8	10	2	5	25
	II	31	14	18	12	75
	III	58	34	44	49	185
	IV	38	16	17	17	88
	V	23	18	13	18	72
	Unclassified	16	8	11	15	50
	Total	<u>174</u>	<u>100</u>	<u>105</u>	<u>116</u>	<u>495</u>
1959	I	3	5	5	4	17
	II	28	23	17	19	87
	III	72	38	43	43	196
	IV	19	24	22	20	85
	V	19	12	7	14	52
	Unclassified	16	9	12	9	46
	Total	<u>157</u>	<u>111</u>	<u>106</u>	<u>109</u>	<u>483</u>
1963	I	6	3	1	1	11
	II	32	20	15	21	88
	III	75	47	56	52	230
	IV	30	29	23	31	113
	V	24	12	12	20	68
	Unclassified	27	10	15	11	63
	Total	<u>194</u>	<u>121</u>	<u>122</u>	<u>136</u>	<u>573</u>

(ii) Percentage of above deaths in each social class

1958	I & II	22%	24%	19%	15%	20%
	III	34%	34%	42%	42%	37%
	IV & V	35%	34%	28%	30%	33%
	Unclassified	9%	8%	11%	13%	10%
		<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
1959	I & II	20%	25%	21%	21%	22%
	III	46%	35%	40%	40%	40%
	IV & V	24%	32%	28%	31%	29%
	Unclassified	10%	8%	11%	8%	9%
		<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
1963	I & II	20%	19%	12%	16%	17%
	III	39%	40%	47%	38%	40%
	IV & V	27%	33%	28%	38%	32%
	Unclassified	14%	8%	13%	8%	11%
		<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

(iii) Percentage of above deaths in each quarter

1958	I & II	39%	24%	20%	17%	100%
	III	31%	18%	24%	27%	100%
	IV & V	38%	21%	19%	22%	100%
1959	I & II	30%	26%	21%	23%	100%
	III	36%	20%	22%	22%	100%
	IV & V	28%	27%	21%	24%	100%
1963	I & II	38%	24%	16%	22%	100%
	III	33%	20%	25%	22%	100%
	IV & V	30%	23%	19%	28%	100%

TABLE E

DEATHS AGED 75 AND OVER

(i) Deaths according to social class. All causes

1963	Class	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Year
	I	1	2	-	-	3
	II	24	10	8	9	51
	III	37	14	21	28	100
	IV	16	15	9	10	50
	V	14	6	4	11	35
	Unclassified	<u>9</u>	<u>2</u>	<u>4</u>	<u>4</u>	<u>19</u>
	Total	<u>101</u>	<u>49</u>	<u>46</u>	<u>62</u>	<u>258</u>

(ii) Percentage of above deaths in each social class

I & II	25%	25%	17%	14%	21%
III	37%	29%	46%	45%	39%
IV & V	29%	42%	28%	35%	33%
Unclassified	<u>9%</u>	<u>4%</u>	<u>9%</u>	<u>6%</u>	<u>7%</u>
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

(iii) Percentage of above deaths in each quarter

I & II	46%	22%	15%	17%	100%
III	37%	14%	21%	28%	100%
IV & V	36%	25%	14%	25%	100%

TABLE F

(i) Deaths aged 75 and over as percentage of all deaths *

1957	41%	49%	31%	42%	41%
1958	41%	44%	34%	51%	43%
1959	49%	36%	41%	46%	43%
1960	44%	45%	38%	37%	41%
1961	56%	48%	39%	40%	46%
1962	50%	49%	41%	42%	46%
1963	52%	41%	38%	45%	45%

(ii) Above percentages for 1963 by social class

I & II	65%	52%	50%	41%	55%
III	49%	30%	38%	54%	44%
IV & V	<u>55%</u>	<u>51%</u>	<u>36%</u>	<u>41%</u>	<u>47%</u>
All included					
Unclassified	52%	41%	38%	45%	45%

(iii) Above percentages for 1962 and 1963 by cause of death
(from table VII Annual reports)

1962	Circ.disease	56%	61%	52%	58%	57%
	Cancer	25%	31%	19%	21%	24%
	Vasc.les.N.S.	74%	67%	55%	50%	63%
	Resp.disease	52%	56%	66%	56%	55%
	Other causes	29%	28%	19%	33%	28%
	All causes	50%	49%	41%	42%	46%
1963	Circ.disease	56%	48%	46%	48%	50%
	Cancer	33%	22%	20%	35%	27%
	Vasc.les.N.S.	64%	50%	85%	79%	70%
	Resp.disease	62%	46%	38%	52%	55%
	Other causes	36%	39%	21%	30%	22%
	All causes	52%	41%	38%	45%	45%

* from annual reports

TABLE G

1963

MAIN CAUSES OF DEATH BY SOCIAL CLASS AND QUARTER

(i) Aged 0 - 74 years

(a) Circulatory disease

Class	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Year
I & II	8	1	2	3	14
III	13	14	14	12	53
IV & V	5	8	5	9	27
Unclassified	<u>6</u>	<u>2</u>	<u>2</u>	<u>1</u>	<u>11</u>
Total	<u>32</u>	<u>25</u>	<u>23</u>	<u>25</u>	<u>105</u>

(b) Cancer

I & II	-	6	3	7	16
III	7	6	14	2	29
IV & V	6	5	5	8	24
Unclassified	<u>3</u>	<u>1</u>	<u>4</u>	<u>-</u>	<u>8</u>
Total	<u>16</u>	<u>18</u>	<u>26</u>	<u>17</u>	<u>77</u>

(c) Vasc.lesions of Nervous System

I & II	-	-	-	-	-
III	2	3	2	2	9
IV & V	3	-	-	1	4
Unclassified	<u>2</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>2</u>
Total	<u>7</u>	<u>3</u>	<u>2</u>	<u>3</u>	<u>15</u>

(d) Respiratory diseases

I & II	1	2	-	2	5
III	8	4	1	4	17
IV & V	3	1	1	2	7
Unclassified	<u>4</u>	<u>-</u>	<u>2</u>	<u>2</u>	<u>8</u>
Total	<u>16</u>	<u>7</u>	<u>4</u>	<u>10</u>	<u>37</u>

(e) Other diseases

I & II	1	2	3	1	7
III	8	6	4	4	22
IV & V	10	6	11	10	37
Unclassified	<u>3</u>	<u>5</u>	<u>3</u>	<u>4</u>	<u>15</u>
Total	<u>22</u>	<u>19</u>	<u>21</u>	<u>19</u>	<u>81</u>

(f) All causes

I & II	10	11	8	13	42
III	38	33	35	24	130
IV & V	27	20	22	30	99
Unclassified	<u>18</u>	<u>8</u>	<u>11</u>	<u>7</u>	<u>44</u>
Total	<u>93</u>	<u>72</u>	<u>76</u>	<u>74</u>	<u>315</u>

TABLE G (continued)

(ii) Aged 75 years and over

(a) Circulatory disease

Class	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Year
I & II	12	8	3	3	26
III	15	8	9	13	45
IV & V	12	7	6	6	31
Unclassified	<u>2</u>	<u>-</u>	<u>2</u>	<u>1</u>	<u>5</u>
Total	<u>41</u>	<u>23</u>	<u>20</u>	<u>23</u>	<u>107</u>

(b) Cancer

I & II	2	-	1	-	3
III	5	1	3	3	12
IV & V	1	3	2	6	12
Unclassified	<u>-</u>	<u>1</u>	<u>-</u>	<u>-</u>	<u>1</u>
Total	<u>8</u>	<u>5</u>	<u>6</u>	<u>9</u>	<u>28</u>

(c) Vasc. lesions of Nervous System

I & II	4	2	4	4	14
III	4	-	4	4	12
IV & V	3	1	2	2	8
Unclassified	<u>3</u>	<u>-</u>	<u>1</u>	<u>1</u>	<u>5</u>
Total	<u>14</u>	<u>3</u>	<u>11</u>	<u>11</u>	<u>39</u>

(d) Respiratory disease

I & II	5	1	-	1	7
III	9	3	1	7	20
IV & V	11	1	1	3	16
Unclassified	<u>1</u>	<u>1</u>	<u>1</u>	<u>-</u>	<u>3</u>
Total	<u>26</u>	<u>6</u>	<u>3</u>	<u>11</u>	<u>46</u>

(e) Other diseases

I & II	2	1	-	1	4
III	3	2	4	1	10
IV & V	3	8	1	4	16
Unclassified	<u>4</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>8</u>
Total	<u>12</u>	<u>12</u>	<u>6</u>	<u>8</u>	<u>38</u>

(d) All causes

I & II	25	12	8	9	54
III	36	14	21	28	99
IV & V	30	20	12	21	83
Unclassified	<u>10</u>	<u>3</u>	<u>5</u>	<u>4</u>	<u>22</u>
Total	<u>101</u>	<u>49</u>	<u>46</u>	<u>62</u>	<u>258</u>

TABLE G (continued)

PERCENTAGE OF CERTAIN OF ABOVE DEATHS IN EACH QUARTER

(i) Aged 0 - 74 years

(a) Circulatory disease

Class	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Year
I & II	57%	7%	14%	22%	100%
III	25%	26%	26%	23%	100%
IV & V	19%	30%	19%	32%	100%
Unclassified	55%	18%	18%	9%	100%

(d) Respiratory disease

I & II	20%	40%	0%	40%	100%
III	47%	24%	5%	24%	100%
IV & V	43%	14%	14%	29%	100%
Unclassified	59%	0%	25%	25%	100%

(f) All causes

I & II	26%	26%	18%	30%	100%
III	29%	25%	27%	19%	100%
IV & V	27%	20%	23%	30%	100%
Unclassified	41%	18%	25%	16%	100%

(ii) Aged 75 years and over

(a) Circulatory disease

I & II	46%	30%	12%	12%	100%
III	33%	18%	20%	29%	100%
IV & V	38%	22%	20%	20%	100%
Unclassified	40%	0%	40%	20%	100%

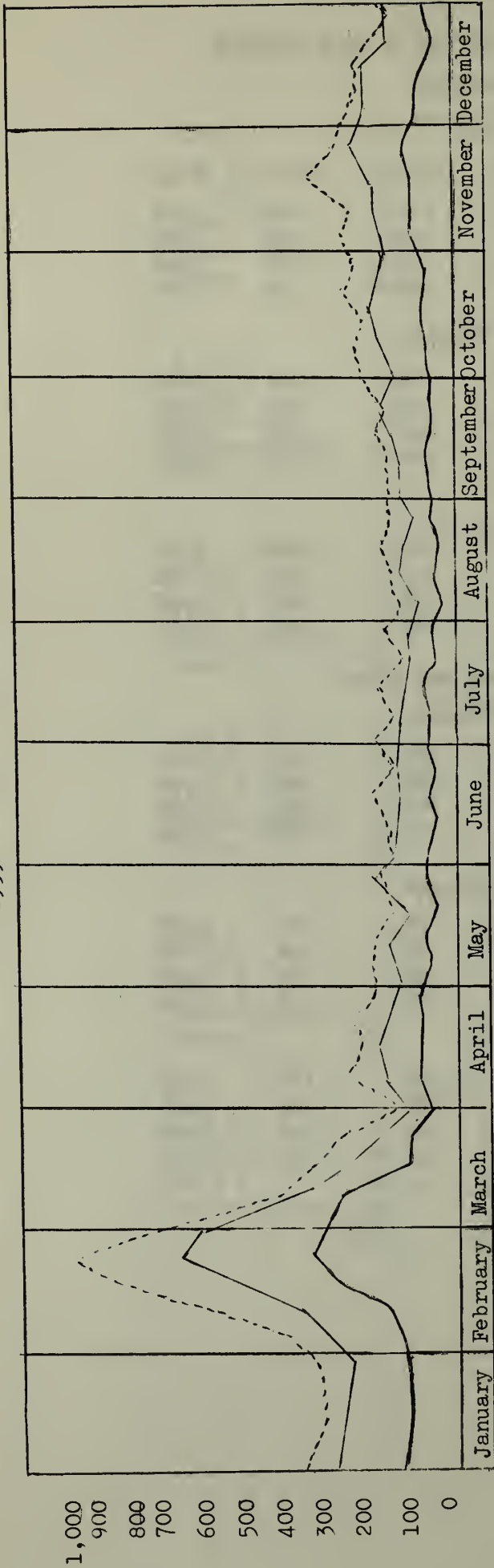
(d) Respiratory disease

I & II	72%	14%	0%	14%	100%
III	45%	15%	5%	35%	100%
IV & V	69%	6%	6%	19%	100%
Unclassified	33%	33%	33%	1%	100%

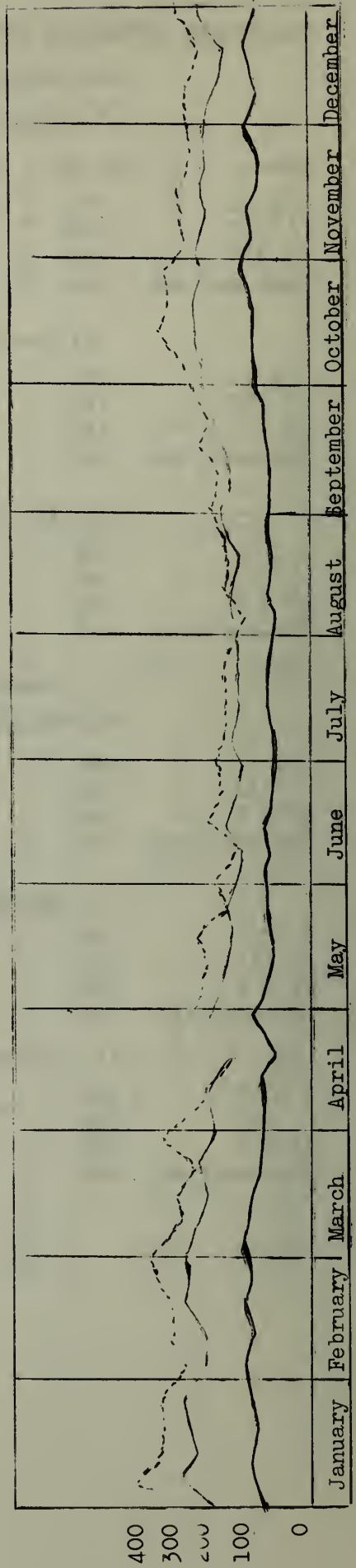
(f) All causes

I & II	46%	22%	15%	17%	100%
III	37%	14%	21%	28%	100%
IV & V	36%	25%	14%	25%	100%
Unclassified	48%	10%	21%	21%	100%

MIN. of P & N.I. FIRST CERTIFICATES OF INCAPACITY
1959

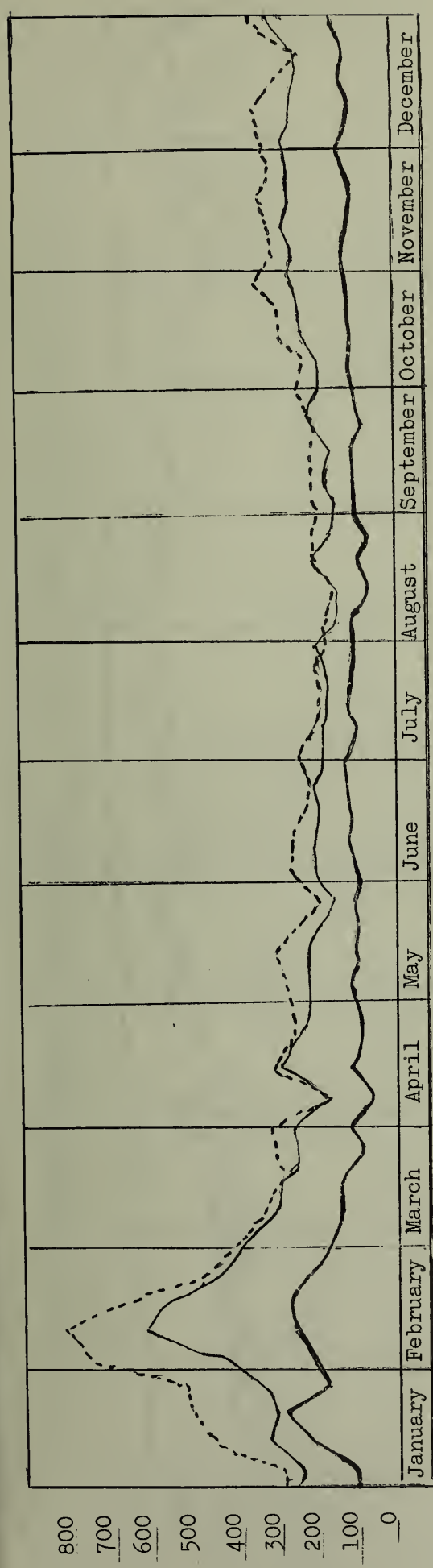


1960

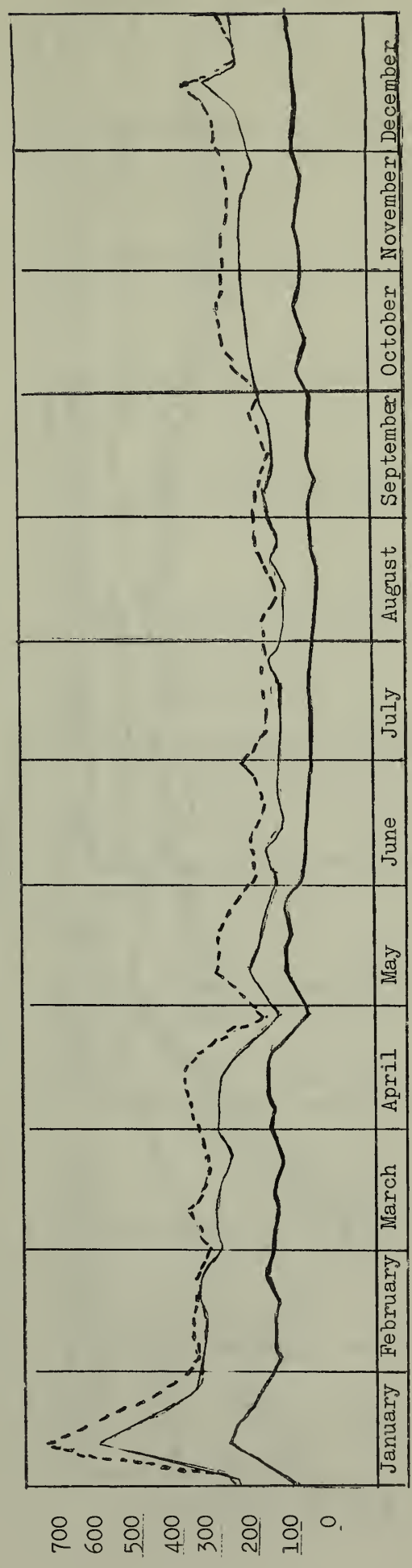


Dartford -----
Gravesend _____
Severnside _____

1961



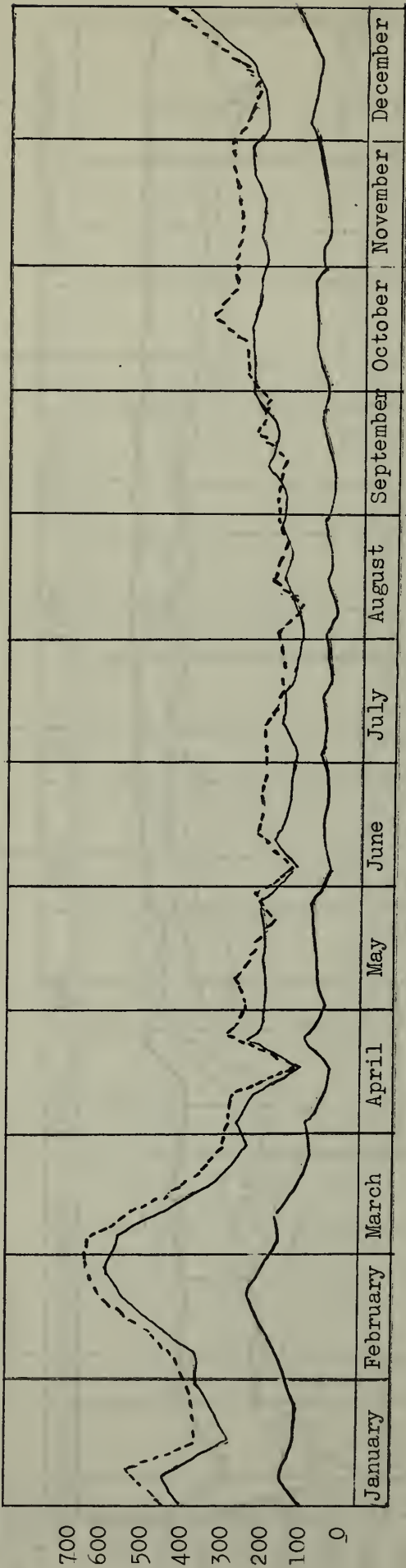
1962



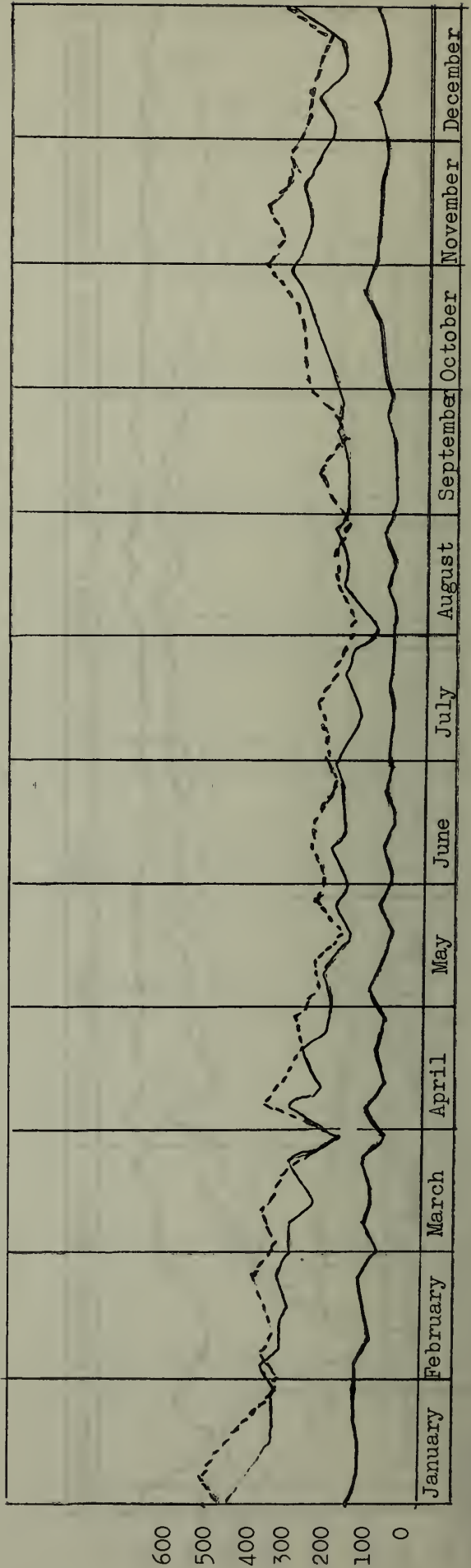
Dartford -----
Gravesend _____
Sevenoaks _____

MIN. of P & N.I. FIRST CERTIFICATES OF INCAPACITY

1963



1964



Dartford -----
Gravesend